THE

PALESTINE EXPLORATION FUND

NOTES AND NEWS.

THE Firman promised has not yet been signed, and early in June Captain Conder brought home his party, and the materials which he has accumulated during the fourteen months' campaign. He estimates that it will take him five months of steady work to get these materials in order for publication.

They consist of the Map of 500 square miles, the field books, note-books, rough drawings, photographs, special plans, descriptions, and observations. All these things were laid before the General Committee at their meeting on June 27th.

The Map is drawn on the same scale as the great Map of Western Palestine, namely, one inch to the mile, and the "Memoirs" are even more full and detailed than those made for the other side. It is in contemplation to proceed at once with the reduction and engraving of the work for the small Map.

Captain Conder was invited to accompany the Princes on their tour through the Holy Land. They were enabled to visit the Mosque of Hebron, of which Captain Conder drew a plan. The Princes visited the East of the Jordan, and travelled through the whole length of the country to Beyrout. Captain Conder is engaged upon a Report of this journey for the Prince of Wales.

As regards the future work, it must be understood that the exploration of Eastern Palestine is not abandoned, but only postponed. The maintenance of the party proved, as was anticipated, a very severe strain on the resources of the Society, and the Committee earnestly entreat their supporters to continue their subscriptions, in order that funds may be accumulated. In the present excited state of the East, it is as well that the party should be withdrawn.

Political significance, which it is desirable to avoid, might be attached to the presence of two English officers.

The second volume of "Memoirs" has been placed in the hands of the subscribers. The proofs of the third volume are with Captain Conder, and the illustrations are nearly ready: this volume will be ready in the autumn. It will be closely followed by Canon Tristram's work.

There are a few copies left, which the Committee are very desirous of placing in public libraries. They would be very much obliged if readers of the *Quarterly Statement* would send them names of libraries. A circular has been prepared giving full particulars of the work and its cost, which can be forwarded to any one on application.

Mr. Saunders's beautiful sections of the country, viz.: one from north to south, and four from east to west, have been laid down on two sheets, so that they can be had separately if desired. They are also laid down on his "Water-Basin" Map. The price of the sheets is 1*s.* 6*d.* each. The Jerusalem sheet of the great Map can also be had separately, at half-a-crown.

The income of the Society from all sources, from March to June, 1882, was £554 19*s.* 7*d.* The amount in the Banks on June 27th, the day of the meeting of General Committee, was £224 16*s.* 9*d.*

It is suggested to subscribers that the safest and most convenient manner of paying subscriptions is through a Bank. Many subscribers have adopted this method, which removes the danger of loss or miscarriage, and renders unnecessary the acknowledgment by official receipt and letter.

Subscribers who do not receive the *Quarterly Statement* regularly, are asked to send a note to the Secretary. Great care is taken to forward each number to all who are entitled to receive it, but changes of address and other causes give rise occasionally to omissions.

While desiring to give every publicity to proposed identifications and other theories advanced by officers of the Fund and contributors to the pages of the *Quarterly Statement*, the Committee wish it to be distinctly understood that by publishing them in the *Quarterly Statement* they neither sanction nor adopt them.

RUDE STONE MONUMENTS OF THE BIBLE.

It has already been suggested by Sepp that many of the monuments mentioned in the Old Testament resembled the rude stone monuments which have lately been attracting attention in Palestine. The following note is merely offered as a suggestion subject to criticism.

Genesis xxviii, 11. Jacob comes to a certain Makom or "place" called Bethel ("the house of God"), probably known to him in the morning by the remains of Abraham's altar (xiii, 4), and here he erects a pillar (מצבה) and anoints it. It consisted of a single stone set up, and seems clearly to have been a menhir. The custom of anointing such stones was common to the Phœnicians, and the recent discovery of cup-hollows in the menhirs beyond Jordan is very interesting in this connection (cf. xxxv, 14). After renewed visits to Bethel I have, however, been unable to find any remains of menhirs or cromlechs at the site.

Genesis xxxiii, 20. Jacob erects an altar in the patch of ground near the well which he dug in Shechem. There was apparently near the same spot an oak under which Jacob buried the Teraphim (xxxv, 4). This is afterwards mentioned as the oak of the pillar erected by Joshua (Josh. xxiv, 26) by the Holy Place of Jehovah (cf. Judges ix, 37, "the enchanter's oak"). According to Jerome the site should be placed at Balâta, the spring near Jacob's Well, but no remains of any rude stone monument have as yet been found (cf. Judges ix, 6).

Genesis xxxi, 45. Jacob sets up a pillar at Mizpeh of Gilead, and this is surrounded with a great heap (Galeed) of stones. Similar cairns have been described in my report on the rude stone monuments of Moab, where the custom of throwing stones at a menhir is noticed. The site of Mizpeh is not yet known, but the cairn may very probably remain. The heap was called "witness," which connects it with other monuments to be mentioned later.

Genesis xxxv, 20. Jacob erects a pillar over Rachel's Tomb. The practice of placing a menhir at a tomb-head is ancient in India, and survives probably in the head-stones of Christian and Moslem tombs alike.

Exodus xxiv, 4. Moses builds under Sinai an altar, and erects twelve pillars, apparently as a cromlech or circle of menhirs. No traces of this appear to have been as yet found in Sinai.

Numbers xxiii. The altars erected by Balaam have been fully noticed in a former paper.

Deuteronomy xii, 3. The Israelites are commanded to "overthrow" the altars, to break the pillars of the Canaanites. This would apply exactly to the destruction of dolmens and menhirs which appears to have occurred in Western Palestine.

Deuteronomy xxvii, 6, and Exodus xx, 25. The altars of Jehovah were to be built of whole stones unhewn, or of earth. It seems not improbable that the earlier altars may have been similar to the dolmens and tells still existing; but according to the Talmud, the Jerusalem altar was formed of a sort of concrete of pebbles in mortar.

Deuteronomy xxvi, 14, and Psalm cvi, 28. "The offerings to the dead" here referred to were often made in Egyptian tombs. The small offerings, on the lintels of tombs east of Jordan, have been mentioned in former reports, and such offerings are found throughout Palestine on sacred tombs. The connection with the worship of Baal Peor in the Psalm agrees with the close connection which is observed in the rude stone monuments between tombs and altars. In some cases it is apparently clear that the dolmens were not tombs, but in India similar monuments have been discovered which are certainly sepulchres. The sacredness of the tombs of venerated ancestors probably explains the connection.

Deuteronomy xxvii, 2. Great stones plastered over were to be set up and inscribed with the words of the Law on Mount Ebal beside an altar of Jehovah. This was done (Josh. viii, 31), and in Egypt also similar inscriptions on plaster have been found. The altar with the inscribed cippi may perhaps have formed a circle or enclosure not unlike Stonehenge. Such a circle is said to exist to the present day in Wâdy Wâleh, and the one at el Mareighât has been described in a former report.

Joshua iv, 9. The twelve stones from Jordan were "set up" at Gilgal. The name Gilgal signifies a circle, and it seems indisputable that a circle of menhirs is intended. There was another Gilgal in the hills near Bethel and a third in the Philistine plain. A place called Jileijil also exists east of Gerizim, and probably marks the site of another ancient Gilgal. It seems probable that circles of stones existed at one time in all these places.

Joshua viii, 20. The body of the King of Ai was covered with a great cairn. This practice is still observed, large cairns being erected over those slain in battle in Moab (as also in England in pre-historic times). It seems possible that the great stone heap of *et Tell*, near the site of Ai, may be the very cairn intended in the present instance.

Joshua xxii, 11. The altar Ed, built by the trans-Jordanic tribes, was, according to Josephus, east of the river. It is remarkable that a great group of dolmens exists at the foot of the eastern mountains, just south of the Jabbok, on the main road from Nablus to Salt. These have not yet been visited by the Survey party, but are described by Irby and Mangles. It is perhaps to one of these that the episode refers, as the Israelites were returning from Shiloh to Mount Gilead, and erected their monument "over against the land of Canaan in the borders of Jordan at the passage of the children of Israel." Similar "witnesses" are still erected by the Arabs (as often mentioned in former reports) wherever a sacred place first comes in sight of the pilgrim.

Judges vi, 26, and xiii, 19. An altar built on a rock and a rock used as an altar are mentioned in these two passages. The occurrence of cup-

shaped hollows in rocks, proper for such libations as are mentioned in the latter passage is instructive. The Sakhrah at Jerusalem and that on Mount Gerizim seem to be instances of such rock altars.

1 Samuel vi, 14. The great stone in the field of Joshua the Beth-Shemite on which the ark was placed remained as an *Ed* (rendered "unto" in A.V., verse 18), or menhir afterwards.

1 Samuel vii, 12. The stone Ebenezer was placed by Samuel as a monument of victory.

1 Samuel xiii, 3 and 23 ; xiv, 1, 4, 6. The word rendered "garrison" is, with only a change of points, the same (מִצֵּבָה), rendered "pillar" in some passages and "image" in others (Hosea iii, 4). Jonathan "smote the pillar," which was perhaps a cippus to mark the Philistine boundary, and at the same time a sacred stone, and for this desecration Israel was "had in abomination with the Philistnes." The pillar seems to have been then removed, and Jonathan crossed over to overthrow it a second time.

1 Samuel xiv, 33. Saul uses a great stone as an altar on which sheep and oxen are slain.

1 Samuel xv, 12. Saul sets up a place, literally a "hand." With this must be compared 2 Samuel xviii, 18, where Absalom's place or "hand" is called a pillar. The word for pillar is מַצֵּב, *i.e.*, an upright thing, not עַמּוּד or column, and it seems evident that a memorial menhir is intended.

1 Samuel xx, 19. The stone Ezel was probably another of these monuments. It appears to have been connected with a cairn, since the words "out of a place towards the south" (v. 41), are more correctly "out of the stone heap" (Argab). Perhaps David had hidden inside a cromlech or dolmen covered by a cairn.

1 Kings xii, 27. The altars of the Golden Calves at Bethel and at Dan were set up by Jeroboam, but there is no notice of any temples having been built in connection with them. Bethel was an old sanctuary, and it seems therefore probable that Dan may have been a former centre of worship. A striking discovery in connection with this episode will be noticed fully in a future report.

1 Kings xviii, 31. Elijah builds an altar of twelve stones, but their arrangement is not specially described.

2 Kings xxiii, 17. "What pillar (A.V. 'title') is that that I see?" Josiah was overturning the idolatrous altars and emblems at Bethel, and the monumental pillar over the grave of the prophet attracted his attention. This is an interesting instance of the connection between pillars which were objects of idolatrous worship, and which the Israelites overthrew, and similar pillars used as head-stones to tombs.

In Isaiah (lxv, 11) the "table for Gad" (or Jupiter), and the "drink offering of Meni" (probably Venus), are mentioned. It seems probable that a dolmen altar may be intended, while the libation would have been poured on the rock, or the table-stone, into a cup-shaped hollow such as have been described in my report on the Moabite dolmens.

An expression in Hosea (xii, 11) seems to be also well explained by referring it to the dolmen altars. "Their altars are as heaps in the furrows of the field." The appropriateness of the simile will strike any one who has seen a field of fallen dolmens and compares it with the heaps of stones collected for clearing the land in any part of Palestine. The great number of the altars at one site seems to be indicated clearly.

The deductions which it seems legitimate to draw from the above passages appear to be.

1st. That Dolmen altars, menhirs, both idolatrous and sepulchral, stone circles and cairns of stone, monumental and sepulchral, are all mentioned in the Old Testament, and probably resembled those which occur in Galilee and beyond Jordan. These monuments form a connecting link between those found in Europe and those of Eastern Asia. They are also similar to monuments discovered by Professor Palmer in the Sinaitic peninsular, and by Palgrave in Arabia, notably with the great cromlech of Darim in the Nejed, the pillar-stones of which are 15 feet high.

2nd. No difference appears to have existed between the monuments used by the Canaanites and those erected by the early patriarchs, by Moses, Joshua, and Samuel. The consecration to a Canaanite deity, and the cruel and obscene character of the worship connected with the Canaanite shrines, was the cause of the destruction of the altars found existing by the Israelites, which were superseded by monuments of very similar character, dedicated on appointed sites to Jehovah; and these were in turn superseded by the Temple and Altar of Jerusalem, before the erection of which the worship in high places, such as Gilgal, Nob, Gibeon, Bethel, Shiloh, Shechem, and Carmel was lawful, according to the Mishna.

3rd. Some of the monuments thus noticed in the Old Testament may perhaps be recognised as existing at the present time, but in other cases they have entirely disappeared, as notably at Gilgal and Bethel.

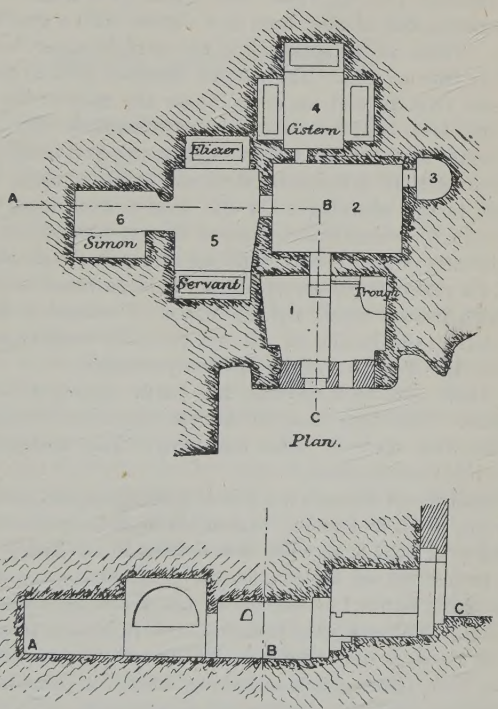
C. R. C.

JEWISH TRADITIONS IN JERUSALEM.

The ancient nomenclature of Jerusalem, according to the traditions of the Jewish population, which has never been entirely banished from the Holy City, presents many points of great interest. The most important of these—the identification of the hillock in which is the so-called grotto of Jeremiah (a name only as old as the 15th century), with the Beth-has-Sekilah, or "place of stoning," has already been published in "Tent Work in Palestine," and it appears to be a very widely recognised tradition among the German and Mughrabi Jews alike.

On the 21st March, with Lieutenant Mantell, R.E., I visited the tradi-

tional tomb of Simon the Just, of which we have now made a plan. This tomb is in Wâdy el Jôz, east of the Nablus road. It is mentioned in Finn's "Byeways," and the annual visit paid to it by the Jerusalem Jews is there noticed. "Simon the high priest, the son of Onias (Eccles. i, 1), was one of the famous successors of Ezra, and chief of the 'Great Sanhedrin.'" He is said to have gone to Antipatris to meet Alexander the Great (Tal. Bab. Yoma, 69*a*), and was high priest for forty years. The beautiful story of



TOMB OF SIMON THE JUST.

his last entrance into the Holy of Holies, when the white apparition failed to meet him as usual, is well known. He ranks among the most venerated of Jewish worthies. Curiously enough, Josephus gives the name of Jaddua instead of Simon, as that of the high priest at the time of Alexander's visit to Jerusalem.

The tomb is rock-cut, but a wall has been built in modern times across

the entrance to the porch, and an iron door put up, with a small barred window on one side. This door is kept locked, and the key was brought us by a Spanish Jew through the kindness of Dr. Chaplin.

The façade is carefully white-washed ; within is the antechamber, $2\frac{1}{2}$ feet below the present surface of the outer ground. A small cistern is cut in the rock bench to the right, and a channel leads thence, round the walls of the next inmost chamber (No. 2), to a hole in the wall communicating with another chamber (No. 4), which was originally a tomb, with three loculi under arcosolia, but is now used as a cistern with a depth of some 3 feet of water. There is no spring, but the surface-water from the rocks is collected in this manner. The second chamber (No. 2) has a single grave on the east (No. 3), and an entrance on the west to the fourth chamber (No. 5) : the level is $2\frac{1}{2}$ feet below the antechamber. The fourth chamber has two loculi, that on the north being the supposed tomb of Eliezer, son of Simon the Just, that on the south the grave of his servant. A small wooden table stood in this chamber. On the west a door leads to the furthest chamber (No. 6), where is the grave of Simon himself on the south side. It is apparently only a bench built up of small rough stones ; but these may cover a real rock-cut sarcophagus. A large vessel of oil was placed on it, in which floated many lighted wicks. I noticed a great many small stones piled in the loculus of Eliezer, probably memorials of visits to the shrine, like the *Meshâhed* of the Moslem peasantry.

The Jews next took us some 200 yards eastwards to a quarry facing northwards. This they assured us was the school and synagogue where Simon the Just used to teach and pray. The tradition has, however, probably little or no value.

The tradition of Simon's tomb is at least three and a-half centuries old, but there is, so far as I know, no mention of it in mediæval Jewish travels before the year 1537 A.D., when it is noticed in the Zichus ha Aboth.

The monument of Helena, Queen of Adiabene, commonly called the "Tombs of the Kings," is known to the Jews as Kalba Shebua,* "the gorged dog." The tradition is that a very rich man lived here, who used to feed all the dogs in Jerusalem. This worthy is mentioned in the Talmud (Tal. Bab. Gittin, 56*a*), as having wished to provide Jerusalem with wine, vinegar, and oil during the last siege (Neubauer's Geog. Tal., p. 137). I believe that M. de Saulcy mentions this tradition, which I have heard independently from a Spanish Jew. De Saulcy also discovered the Sarcophagus of the "Princess Sara," mentioned by M. Clermont Ganneau as possibly representing that of Queen Helena ; and remains of the stelæ, which, according to Pausanias, stood above Helena's tomb, have been excavated some years since at this same site.

The well known "Tomb of the Judges" is called by the Jews "Tomb of the Seventy," who appear to have been members of the Great Sanhedrin. The tomb is generally supposed to belong to the Hasmonean period,

* Kalba Shebua seems to have been a mythical character. R. Akiba, who died 135 A.D., is said to have married his daughter (Tal. Jer Ketuboth, 63*a*).

which would perhaps allow of its having been the sepulchre of members of the Sanhedrin. The Judges mentioned in the Bible were buried each in the territory of his own tribe. The tradition connecting this tomb with the Sanhedrin, is mentioned as early as 1537 A.D.

C. R. C.

JEWISH SUPERSTITIONS.

It is well known that superstitions not based on the law of Moses are very firmly credited by the more ignorant of the Polish and other Ashkenazi Jews. Some of these, which are common among the Jerusalem Jews, may be noted, including the nail-parings, the blessing of the moon, the subterranean journey to the valley of Jehoshaphat, the Hand of Might, the Tashlich, etc. A volume of very curious information might be composed on Syrian superstitions, and I hope to collect some scattered notes on the subject, and to indicate the construction with older sources of superstition, when circumstances permit.

The English superstitions regarding the days on which it is lucky or unlucky to pare one's nails seem to be of Jewish origin. The very order in which the nails should be cut is detailed in the Cabbala, and the Friday is prescribed, but Thursday forbidden in order that the nails themselves may not break the Sabbath law by beginning to grow on the Sabbath. The parings are to be burnt or concealed, not thrown on the ground, as, if they chanced to be stepped over by a woman, it might bring her mischance. The Jewesses are careful to hide the nail-parings in cracks of the house walls, but it is said that they sometimes put them into puddings intended to be eaten by their husbands, in order to increase the affection of the latter. They put hair from their heads into puddings for the same reason. The Talmud notices the harm which may be done by leaving nail-parings on the ground (Tal. Bab. Moed Katan, 18*a*).

The blessing of the moon is a curious custom very much reminding the observer of moon worship. According to the Cabbala, it is only to take place when the moon is at least seven days old, and must be observed once a month in the open air. The worhipper about to sanctify the new moon is to stand, with one foot on the other, to give one glance at the moon, and then to bless in the name of the Holy One, of His Shekinah, and of the Hidden One (a Cabbalistic Trinity). The form of prayer commences "Blessed be thy Former, blessed be thy Maker, blessed be thy Possessor, blessed be thy Creator." After meditation the worshipper is to skip three times, pronouncing the words "Fear and dread shall fall upon them, by the greatness of thy arm they shall be as still as a stone," repeated thrice, and thrice backwards; next he pronounces loudly, "David, the King of Israel, liveth and existeth," and then salutes his neighbour.

This ceremony I once saw being performed, by a Polish Jew, on a house-top in the Jewish quarter of Jerusalem, and was hardly able to believe my own eyes, so closely did it seem to me to approach moon worship. Further investigation, however, serves to explain the meaning of the performance. The standing in contemplation with one foot on the other is also observable among Derwishes.

The superstition that it is unlucky to see the new moon first through glass, common in Europe, is perhaps connected with the fact, mentioned in the Mishnah, that the evidence of a witness was not taken as to the appearance of the new moon, if he first saw it through glass or in water.

The Jews are apparently ashamed of such superstitions, and it is very difficult to obtain information on the subject. There can be little doubt, however, that the reason why many Jews wish to be buried on the Mount of Olives, is that they dread the subterranean journey (cf. Tal. Bab. Ketuboth, 111*a*), which they suppose the body must perform on the day of judgment from the place of burial to Jerusalem. In Poland it is said the Jews place small wooden forks in the graves to assist the dead man to dig his way. This curious idea is probably connected with the old Egyptian belief in the journey of the soul, as set forth in the "Book of the Dead."

The "Hand of Might" is a mark found commonly on Jewish (and sometimes on Moslem) houses, often elaborately sculptured. It brings good luck to the house. The mediæval talisman, called "the hand of glory," has no doubt a common origin. The Jewish wedding-ring in Jerusalem is in the form of a hand (as Dr. Chaplin informs me), and small glass hands are used as charms. In India the hand is the symbol of Siva, and indeed to write its history requires a volume by itself. It is interesting, however, to find this widely spread superstition also believed by the Jews.

The Tashlich, or ceremony of casting the sins of the individual into running water on new year's day (supposed to be supported by the words of Micah vii, 19), is strongly condemned by the cultivated Jews of Europe. I have not been able to find whether it is observed in Palestine, where water is scarce.

The mythology of the Talmud would form a rich treat to students, could it be extracted from the the crabbed Talmudic dialect. Many of the famous fables, which are common property of the Asiatic races, are to be found, with a Jewish moral attached, in the Babylonian Talmud. Among others the story of the man with two wives, which I have noted as existing among the Arabs east of Jordan, is applied in the Gemara (Tal. Bab., Baba Kama, 60*b*) to the two divisions of the Talmud which are mutually opposed, the Halacha or practical, and the Haggadah or poetical commentary.

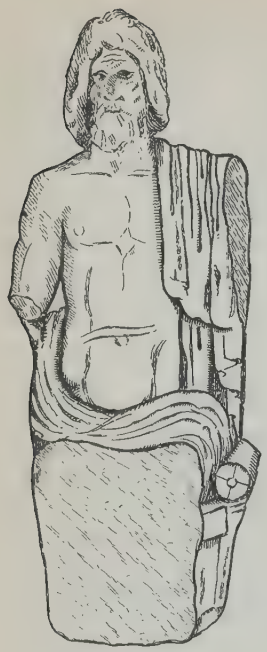
C. R. C.

NOTES FROM CONSTANTINOPLE.

I took advantage of my late stay in Constantinople to visit the Musæum with a view of ascertaining what antiquities may be stored there which came from Syria. The director, Hamdi Bey, a distinguished artist, only lately appointed to the post, is actively employed in cataloguing and arranging the collection, which is far larger and more valuable than I had supposed. He received me with great courtesy, but was, unfortunately, not able to give much information, as he was as yet very little informed as to the contents of the Musæum. His predecessor appears to have left everything in confusion. There is as yet no catalogue, and the objects are not marked, nor is it known in most cases where they were found. The coins are now being arranged and classed, but the statues, inscriptions, and bas reliefs are only very roughly divided out as Roman, Assyrian, and Egyptian. It appears that the pottery and many of the metallic articles have only been catalogued by *weight*—"ten pounds Cyprus pottery," or "twenty tons bronze statues," etc., etc., a method which perhaps is scarcely sufficient to mark the difference of value between the various objects. An attempt was however made a few years ago to classify the broken statues by placing all the legs in one case, the heads in a second, the arms in a third, etc., but this appears to have led to some uncertainty in the end as to the parts which together made up the original statue.

The only antiquities which I was able to recognise were the famous Hamath stones and the great statue from Gaza. The former were classed as Assyrian antiquities. I found no other Hittite inscriptions, and the Gezer stones were not in the Musæum, so far as I could learn, nor was any one among the officials aware of their existence, although they were seized by the Governor of Jerusalem in 1874. Hamdi Bey had heard of the Siloam inscription, of which he was anxious to obtain a copy. He complained greatly of the way in which the regulations concerning antiquities were disregarded by explorers, and I had great satisfaction in explaining to him that the Society by which I was sent out had never transgressed in this respect since the regulations were first promulgated in 1874.

The Gaza Jupiter. This great statue was discovered, in 1880, by the natives at Tell 'Ajjûl south of Gaza, and we owe its preservation to the exertions of the Rev. W. Shapira, the missionary. The Arabs had at once commenced to break up the statue, and had succeeded in greatly damaging the face. Mr. Shapira persuaded the governor to set a guard over the place, and the antiquarians of Palestine owe him a debt of gratitude for having prevented the entire destruction of this unique monument. A paper descriptive of the statue will be found in the *Quarterly Statement*, with the measurement of its principal proportions. I now send a copy of the sketch which I have just made from the



original in the porch of the Musæum. The suggestion which I ventured to make at the time seems to me to be fully borne out, and there can, I imagine, be little doubt that the figure is intended for a Jupiter. The principal deity of Gaza was called Marna (*i.e.*, מרנא "our Lord"), and was worshipped as late as the fifth century A.D. (Epiphanius Adv Hœret). He was a deity who controlled the rain, and his temple was destroyed by St. Porphyirus (Acta Sanct). According to Lenormant he was a god similar to the Cretan Jupiter and the Phœnician Eshmun—the chief among a group of seven or eight deities ("Lettres Assyriologiques," Vol. II, Letter V, p. 165, *seq.*). These seven *Cabiri* or "great ones" appear to have all had temples in Gaza. That of Marna, destroyed by the Christians, was round, with two outer porches or circles—a kind of Druidical circle perhaps. His other titles were "the living," "the eternal," "the universal," "the everlasting." It seems probable that the statue at Constantinople may be that of the Jupiter Marna of Gaza. The nose and face have been damaged, but the arrangement of the hair reminds one of the classic Jupiter. The right arm is broken above the elbow, the left appears to have been sawn off. The figure was seated on a bench, but the legs have also apparently been sawn off in front. These mutilations had been, I believe, effected before the statue was discovered, and it seemed to me possible that the pious pagans may have buried their Jupiter to save him from the Christians, and may have been obliged to divide it for facility of transport. Excavations should certainly be made at Tell 'Ajjûl, as the rest of the statue may yet remain buried as well as the Venus of Tetramphodos, a place apparently in Gaza itself. A curious tradition of buried treasure, and of a phantom calf which guards it, exists at Tell 'Ajjûl ("the calf's mound"), and it is perhaps possible that a temple stood on the hillock.

Sta Sophia. I also paid a visit to this famous church of "Holy Wisdom" founded by Constantine, and built by Justinian, and was shown the curious hand mark on the wall and the "sweating pillar," with a hole in the marble about the depth of a finger. It seems to have been made by innumerable pilgrims putting their fingers into the crack in the metal covering, to feel the supposed perspiration of the marble. No doubt this sacred mark is to be classed with the finger mark of Gabriel at Jerusalem, and other much venerated prints on rocks. I found the

flagging of the upper galleries covered with Greek mason's marks, such as I have never seen except here and at Baalbek ; some of these marks were single letters, but others seemed worth attention for comparison with the marks which I have noticed on pillars at Ascalon and at 'Ammân. They are as given below.

The second, if turned upside down, is just like a ligatured Phœnician inscription.

But another observation of greater interest referred to the wooden beam which runs from pillar to pillar in the upper order of columns. I have had occasion to mention this as an Arab architectural feature, and at first supposed that the beams in this case also had been added by Moslem restorers of the church. The beam is not structural, but affords an additional brace to the pillars, and spans the round arches just as it does in the mosques at Jerusalem, Damascus, and Cairo. I found, however, finally, that one of these beams is ornamented with well cut Greek crosses, in relief, evidently the work of Byzantine masons. Mr. Fergusson will no doubt welcome this little fact (unless he has previously himself observed it) as confirming his views of the Christian origin of the Dome of the Rock. It would, however, be interesting to know whether Byzantines and Arabs alike may not have borrowed this kind of tie-bar from Sassanian architects.

I also observed a very peculiar cross, with various devices at the ends of its arms, occurring on some of the capitals. This cross is exactly like one which we have recently found in a Byzantine ruin in Moab.

The old walls of Stamboul are built of moderate square masonry, in courses alternating with one or more courses of flat bricks. The original work is Byzantine, and the structure has been adopted by the Venetians and later restorers of the walls. This structure we have never found in Palestine, but I found a fragment of wall so built at Kadesh, and the present observation seems to confirm the impression I then obtained that the ruin in question was part of the Roman town of Laodicea, which rose on the ruins of the older site of *Kedes*.

C. R. C.

NOTES ON MR. TRELAWNEY SAUNDERS'S INTRODUCTION.

The Surveyors of Western Palestine owe their best thanks to Mr. T. Saunders for the appreciation and discriminating praise which he bestows on their work. Criticism from a geographer so well acquainted with the

preceding maps of Palestine, is the best test which could be applied to the work. I hope, therefore, it will not appear ungracious if I attempt a reply to one or two pieces of criticism in the "Introduction." I must also express my regret at the numerous printer's errors, which appear to have arisen from the indistinctness of the photo-lithographic reproduction of our MSS. maps. Several of these have also found their way into the corrected index of the Introduction, and should be revised in a future edition.

Aneroid heights (pp. 21, 176, 179). These were collected according to the names, as it was found impracticable to fix the exact points to which they should be written in cases where no name or special object of detail is shown. They were all calculated by Mr. Armstrong, under my direction, in 1877, but a certain proportion were judged to be below the standard, and not good enough to insert on the map. This is specially the case in Galilee. One of Lieut. Kitchener's aneroid barometers appears to have got out of order; unfortunately this was not discovered by his field party in 1877, and we were obliged to condemn the whole of the observations taken with this particular instrument (including his levels of the Hûleh Lake) after the observations had been calculated. We shall endeavour to fix the Hûleh level by vertical angle from the eastern shores.

The height, 136 feet at Shefa 'Amr (p. 200), applies to the spring, not to the village (as is clearly shown on the map). The village stands on a hill, as described in the Memoirs. This height is settled by numerous observations. I think the aneroid heights on the map may be relied on within 20 or 30 feet, and a comparison with some of Colonel Warren's observations confirms this calculation. The level marks are fixed within six inches. The heights of the trigonometrical stations within two feet or three feet.

Nahr Rûbîn (p. 46). It is true that this stream dries partly up, but a string of pools is left, as in the case of the Kishon, and it is therefore marked as perennial.

Kaukab el Hawa (p. 68). I have endeavoured to show in a previous *Quarterly*, that this name means "fortress of the gorge," which seems more probable than "star of the air."

Coabis (p. 70). I have tried to show in the Memoirs that this site is the present Mekhobby on the Roman road. *K'aûn* has not a single letter in common with Coabis.

Maiumas Ascalon (p. 141). An explanation of this name, and the discovery of a second inland Ascalon, were noted in the *Quarterly Statement*, 1875. There is another Ascalon north of Jerusalem, and it seemed to me that the famous Philistine city was called Maiumas, "the watering place," in contra-distinction to the inland town.

Geology (p. 144). I have completed a small reconnaissance map of the geology of Western Palestine, accompanied by sections of great interest, and detailed observations. Many parts of the country, especially round Carmel, are incorrectly described by M. Lartet, but we found his observations round the Dead Sea very valuable. The view suggested by

Lieut. Kitchener, and mentioned by Mr. Saunders, seems hardly supported by the facts now collected.

Megiddo (p. 159). Mr. Saunders does not seem to have known, when writing this passage, of the identifications proposed in support of my suggestion as to Megiddo, namely, *Beit Jenn* for Beth-haggan, *Yebla* for Ibleam, *Kâra* for Gur; and he remarks that these sites should occur in the vicinity of *Mujéddu'* if my view were correct. This is just what I have tried to show is the case.

The high mountain (p. 166). The tradition placing this at Quarantania seems quite modern. In the middle ages the latter was shown, not as the scene of the Temptation, but of the Fast of Forty Days, as the name also intimates. The mediæval scene of the Temptation was first recovered by the Survey party at the Osh el Ghurâb.

Dead Sea Shores (p. 170). The Survey outline is controlled by tangential lines from the trigonometrical stations; before these stations were fixed, it must have been almost impossible accurately to map the shores, and we found the indentations much exaggerated on the maps, which is the natural tendency in sketching, as the distances are foreshortened to the eye. We have found the same to be the case last year on the eastern shores.

Identifications. Mr. Saunders only alludes to a small percentage of the known sites mentioned in the Memoirs. I cannot help regretting that he should support what may I think be called the exploded theories as to Lachish, Kirjath Jearim, and Shihor Libnath. The site of Abu Gheith, which he proposes for Gath, cannot have been that of an important town. He also speaks of Lejjûn as if it were almost certainly the ancient Megiddo, although there is hardly an argument in favour of this view beyond the proximity to Taanach. An identification is merely a vague conjecture unless the ancient name can be proved still to exist. It was for this reason that I attributed to Mr. Selah Merril the recovery of Succoth, as no previous writer seems to have recognised the value of the existing name. In the same way the name Haiyân was unknown to Robinson, though by a lucky conjecture he pitched on the site in question as representing Ai. I may, perhaps, be allowed to express the opinion that it is entirely a false supposition that the names of Hebrew towns have been *translated* into Arabic names having the same meaning though a different word. The tendency of the Fellahin is towards the preservation of the *sound* not of the *sense*, as can be proved by an overwhelming number of examples. With the exception of Tell-el-Kady I know of no well established instance of the converse being true, and even in this exceptional case the old name Dan appears to survive in the immediate vicinity. The identifications of Tubania, District, Geba of Horsemen, and Janum, I was, so far as I can find, the first to propose; it is not quite clear whether these have been independently fixed at the same spots by Mr. Saunders, but if this is the case the coincidence is very satisfactory. I am very glad to see that many of the proposed identifications which I have felt most confident in publishing have been adopted by Mr. Saunders.

Many others will be found in the pamphlet on "Biblical Gains," amounting to some 130 in all; but there are a great many Byzantine and Crusading identifications due to the Survey, which I have as yet only noticed in the Memoirs, where the authorities are given in full.

Valley Names (p. 163). Mr. Saunders notices a group of small valleys in the Ghor, some of which have names not marked on our map. It should be noted, however, that in many cases the name does occur, applied to a ruin, spring, or other object, in or near the valley as shown on the Survey. The surveyors who have worked with me (including Mr. Tyrwhitt Drake) have always been of the same opinion, that it was only the main water-courses of the country which have really distinct names of their own. Even these constantly change their names, along their courses, as may be seen on the map, and are called after the villages and ruins they pass. The small valleys have no real names at all. We have remarked, in the Bedawin districts especially, that there are *local titles*, generally taken from a ruin or remarkable feature, and applied to all the natural objects near it. Thus if a ruin is named Mushukker, we have 'Ain do., Jebel do., Wâdy do., Sahel do., etc., all round it: and each traveller has perhaps collected one out of this group of half-a-dozen names, the only one of value being probably found at the ruin. Springs have often valuable names with traditions attached, but the names of hills and valleys, as a rule, are either purely descriptive, or else taken from the village, ruin, or spring. I have already written at length as to the fleeting "secondary nomenclature," as distinguished from the ancient and unchanging nomenclature of the ancient sites. These views are confirmed by our late experience, and although names of interest may have escaped the Survey party, or have been rejected as not resting on reliable evidence, the experience of our various revisions has been, that, unless a ruin had escaped notice, the additional names collected yielded nothing of any value.

I have, however, in the case of the names mentioned by Mr. Saunders examined the Map (Sheet XII), and subjoin the results of my investigation. It appears that our work agrees with that of Colonel Warren, but the nomenclature of M. Guerin cannot fairly be placed, I think, on an equal footing with that of the Survey, because it has evidently not been written down by an Arab scribe; while the hasty character of his journey would of course prevent his verifying the names which he has given. The names in question are as follows:—

Names Collected by Colonel Warren.

Sheet XII of Survey.

1. Wâdy Umm Karuby. This is probably Wâdy Umm Kharrûbeh, "valley mother of the locust tree," marked on the map, but not noticed by Mr. T. Saunders.
2. Wâdy Umm Dahideh. "Valley mother of the flock of camels," a name not on the map; apparently not important.

3. Wâdy Shiyeh. Apparently for Wâdy Sh'aîb. There were, unfortunately, some errors in the Arabic of Colonel Warren's list, as pointed out in former papers by M. Ganneau and by myself.
4. Wâdy Swaideh. Apparently named from Khûrbet Suweideh; shown on the Survey.
5. Wâdy S'aidîyeh. Proper name; the ford of S'aidîyeh, is marked on the map.
6. Wâdy Abu Jerad. "Valley father of locusts" (or perhaps "barren valley"), not named on the map.
7. Wâdy Belgod. The name Sidd el Belkawy occurs on the map near, applied to a cliff. This is probably the same; and Belgod cannot well be an Arabic word.
8. Wâdy Abu Hashîsh. "Valley father of grass." The cliff of Abu Hashîsh is marked on the map.
9. Wâdy Ghor. This seems improbable, especially as it has no article. It is probably not a real name. The Ghor is the whole basin.
10. Wâdy Abu Sidra. The form Wâdy Abu Sidreh, "Valley father of the lotus-tree," occurs on the map, and is more correct than Sidra.

Thus out of ten names only two are really omitted on the map, though the rest are written to the objects whence the valleys are named. The two omitted do not seem to have any particular value.

Names Collected by M. Guerin.

(Sheet XV).

1. Wâdy Rhazal. This is the French spelling of Ghazal. A spring "Ain el Ghazal" (of the Gazelle) is marked on this part of the Survey map.
2. Wâdy es Seder. Wâdy Abu Sidreh occurs on the map, but not apparently in the same order. There are many lotus-trees in this district, whence probably the name.
3. Sath el Rhoula. Probably Sâdet el Ghuleh ("Ghoul's Cliff"), not on the Survey.
4. Khurbet el Bridje. Apparently "Ruin of the little tower." Two are marked on the Survey.
5. Wâdy es Sekaah. Apparently for Zôkah-Râs; Umm Zôkah here occurs on the Survey.
6. Hosh ez Zakkum. "The courtyard of the balsam-tree," apparently at Khûrbet Suweideh, whence the valley called Umm ed Deraj ez Zakkûm is shown descending on the map.
7. Wâdy en Nekeb. "Valley of the hollow," a name so common that it can hardly be called a local title.
8. Tell es Saidieh. Apparently out of place. The name occurs at a ford of Jordan near a tell a little further north.

9. Wâdy Asberra. This can hardly be an Arabic word. Probably some error has crept in. The name Sâdet et Ta'leb occurs here on the Survey, "cliff of the fox."
10. Wâdy Abu Sehban. This word also does not seem to be Arabic. The valley is called on the Survey Jûrat el Kutufi, "hollow of the St. John's wort"—a plant growing abundantly here.
11. Wâdy Kefr Anja. Unknown.
12. Wâdy ez Zarha. Apparently "broken valley." It is called Abu Hashîsh on the map; both names are of little value archæologically.
13. Wâdy el Eurkan. "Valley of cliffs." This like the preceding would apply to any of the little valleys hereabouts, as they all have low cliffs. It is called Abu Lôz on the map.
14. Siret el Maazeb. "Fold of the summer grazing place." These folds are marked (there are several). The peasantry from the villages use them in spring. This formidable looking name is consequently nothing beyond a description given by the guide of what the enclosure was used for.
15. Khurbet es Sîreh. "Ruin of the fold." *See* preceding.
16. Wâdy Abu Sedra. Sidreh on the map, which is a more correct way of spelling the word, as the final Aleph is very rare.

Out of these 16 names, therefore, only Nos. 3, 7, 9, 11, can be fairly considered to be omissions, and of these one seems to be a mistake, and the others unimportant; unless it be Kefr Anja—a name not noticed by any other traveller.

The above comparison seems to show how necessary it is, both for the explorer and the critic, to be acquainted with Arabic, and especially with the local Syrian dialect, which presents many peculiarities in the use of topographical terms, which may be studied in the Name Indexes now published. It also serves to illustrate the contention that the names of the smaller valleys, especially in Bedawin districts, have very little importance for the antiquarian. Several misprints occur on this page of Mr. Saunders's work, *e.g.*, Katurj for Katwy, and Taleh for T'aleb.

C. R. C.

NEW IDENTIFICATIONS.

Mount Baalah (Josh. xv, 11). A relic of this lost name may perhaps be recognised in the *Wâdy el Baghl* (the *gh* representing one of the two Arabic equivalents for the Hebrew 'Ain), which runs into the Valley of Sorek from the north, on the west of Zoreah. The name appears to have applied to the Ekron ridge (*see* "Handbook to the Bible").

Bethsaida. Without entering into the controversy whether there were

one or two places so-called, on the shores of the Sea of Galilee, it may be noted that the mediæval writers place the so-called Galilean Bethsaida at Minieh. The name of the little sacred place 'Aly es Seiyâd ("the fisher") may be a survival of this idea.

Beror-Hail (Midrash Koheleth vii, 7), the place to which Rabbi Johanan retired when the younger Gamaliel took charge of the school at Jamnia. It appears to have been in the Philistine plain, and is perhaps represented by the modern village *Bureir* south-east of Ascalon.

C. R. C.

NOTES.

JERUSALEM, 15*th March*, 1882.

Kadesh on Orontes. Mr. Tomkins will not expect me to abandon so favourite a child as this, without a careful debate, and it is evident from the tone of his paper (*Quarterly Statement*, 1882, p. 47) that he is anxious to discuss the matter without prejudice. I am, however, obliged to wait until I can consult Lepsius, the Epic of Pentaur, and other authorities, before replying. I cannot but think, however, that the evidence in favour of our discovery will prove too strong, and that the north point on the famous Egyptian bas relief will have to be placed differently from his supposition. *N.B.*—I have, since writing this, consulted Lepsius and Rosellini, and the result seems to confirm my views as to Kadesh in a remarkable manner, as I hope shortly to show.

The Funeral Tablet. The interesting paper by Mr. Boscawen on this matter contains much fresh information. On reading Le Normant's "Magie," it seemed clear to me that the three figures on the right of the third division represented the soul escaping from the evil genii, who turn against one another, as described in the Accadian Magical Formulæ, a view which Mr. Boscawen has fully worked out. The two fish-deities seem to be similar in idea to the Egyptian figures of Isis and Nephtys, as represented standing at the head and feet of the mummies, and to the angel Munker and Nakîr, whom Moslems believe to question the soul. The same belief is well known to have existed in the Mazdean faith, and the Persian story of the soul's trial, by its own thought, word, and deed, is one of the most beautiful fancies in the Zend-Avesta. Mr. Boscawen's notes do not seem to militate against the idea that the deities in the second row are the planetary genii, but these belong to Assyrian rather than Accadian mythology. I have referred in my original paper to M. Clermont Ganneau's previous description of the tablet, from which I obtained various valuable indications, which I hope I acknowledged sufficiently. M. Ganneau, however, promised a further paper on the subject to the "Revue Archéologique," and I am not aware whether this has ever been published. It is to be hoped that he will be able

to send it to the next *Quarterly Statement*. The tablet was not found in Phœnicia, so far as I understood, but the mythology of the Assyrians, Accadians, Egyptians, and Phœnicians, has so much in common that it must be extremely difficult to distinguish the sources of the ideas forming the subject of the reliefs.

Rock Rimmon. I must leave the readers of the *Quarterly* to decide on Mr. Birch's arguments, which do not seem to me to dispose of the difficulty that 600 men cannot have lived in the cave which I have now carefully measured (*el Jâi*), and of which I have forwarded a plan. No such cave is mentioned in the Bible in connection with the Rock Rimmon, and there appears to be no tradition of any value for Biblical purposes at el Jâi. As to the meaning of the word *Sela* it is probably safer to follow Gesenius, even when Dean Stanley does not agree with this respected authority. The rest is matter of opinion, which those interested will be able to settle for themselves.

Sion. The views which I have briefly advocated in this matter seem to me to have the advantage that they allow of every one of the disputants being right. All writers have quoted Biblical texts in favour of their views, and it seems to me that if we admit that Sion was a poetical name for the "sunny hill" on which the Holy City stood, without endeavouring to limit the meaning of a term which seems employed differently by various Old Testament writers, we shall be able to do justice to the erudition of Robinson, Fergusson, Williams, Reland, and later writers alike.

Tyropœon. Some able writers have suggested a Hebrew origin for this name. Two explanations occurred to me while writing the Jerusalem article for the "Encyclopædia Britannica." First that the original form was (צרפד) from a root occurring in the name Sarepta (now Sarafend), in Surîf (which I have proposed as identical with the Sariphœa of the Church Histories, placed by Vandevelde at Safirîyeh), and in many other instances in Palestine. The root is connected with the idea of smelting silver, and is found in the Arabic *Serf* ("to change," according to Freytag's Lexicon). It is now applied to "small change," *i.e.*, silver when given for gold. Now in Jerusalem, since the 8th century A.D. to the present day, the shops of the money-changers have been placed in the Tyropœon valley, along David Street, and round the Hospital of St. John. Bernard the Wise alludes to this, and part of the street in question is called by Mejr-ed-Dîn *Khân es Serf*, possibly a preservation of the name Tyropœon down to the 16th century. I have not been able to ascertain if this name survives, but it is probably forgotten, for the street nomenclature of Jerusalem differs greatly from that in the time of Mejr-ed-Dîn, as appears on comparison of his account with Sir C. Wilson's map. The canon of "*immutability in oriental custom*," on which we may so often safely rest, would render it possible that the Jewish money-changers of the time of Josephus may have sat (only some 30 feet nearer the rock) on the very spot where their descendants now await their victims; and in this case the Tyropœon Valley was that not of the cheese-makers (who were probably only found in the pastoral districts far south), but of the "money-changers," who at times

encroached down its course within the very gates of the Temple, where according to the Talmud they erected booths in a specially allotted part of the area.

The second suggestion is that the name Tyropœon is derived from the Hebrew Teraphim (possibly from the Sanscit *Sarpa*, whence also Tseraphin and our English "Serpent"). The Canaanites in general worshipped Teraphim down to a very late date, and the brazen serpent was worshipped in Jerusalem by the idolatrous kings.

I hope to show, in a further volume on Jerusalem, that the traditional Golgotha is neither more nor less than the site of the original temple of Venus, which Constantine found rebuilt, and from which the name *Kadesh* or *Kuds* came to be applied to Jerusalem; but yet more that this old temple of Ashtoreth was the Jebusite Sanctuary before David took Jerusalem, and round which the sepulchres of the kings were hewn, after the worship of Jehovah had consecrated the Temple Hill. This would be another instance of the immutability of sacred sites in the East. The name of the Teraphim, which would have belonged to the Jebusite Sanctuary, may have lingered in the valley beneath the knoll, with its sacred cave (the Chapel of Adam), now shown as the site of Calvary. Its signification may have been forgotten by the time of Josephus, and the Teraphim may have been converted into those yet greater magicians the money-changers.

These conjectures must be taken for what they are worth, as the subject cannot be fully worked out in a brief note, without reference to authorities.

Kirjath Jearim. The identification of this spot with the "nameless city" of Samuel (1 Sam. ix) appears to be extremely probable, on the grounds stated by Mr. Henderson, and the topography of this difficult episode seems to me best explained on the supposition of a tour north, west, south, east, and again north, from the starting point. Mr. Schick has lately identified the land of Shalem with the district of the Beni Sâlim, and although there is a difficulty in this, because of the guttural in the Hebrew, the idea is well worthy of consideration. The land of Shalisha seems to have lain further north-west (judging from the Onomasticon) in the direction of *Kefr Thilth* (the exact equivalent of Shalisha in Arabic), where are several places with names from the same root, meaning "three." This would lead Saul naturally through the western part of the land of Benjamin to Kirjath Jearim. So many sites have, however, been proposed for the latter place, that it must rank with Megiddo and Gibeah, on a much lower level than those numerous places concerning which controversy has been laid at rest. It is to be hoped that the general reader will not be liable to forget that a very large proportion of the discoveries made by the officers of the Society have been generally accepted by the critics, and that those now in dispute are connected with sites vaguely or incidentally mentioned in the Bible. It is a matter for hearty congratulation that the keenest critics whose notes appear in the *Quarterly Statement*, write with so much good feeling and such absence of rancour.

C. R. C.

EASTER CEREMONIES OF THE WASHING OF FEET.

JERUSALEM, *Easter*, 1882.

AMONG the numerous ceremonies observed by the Christians in Jerusalem at Easter time, is that which commemorates Christ's washing the feet of His disciples, celebrated by both the Greeks and the Latins.

That of the Greeks took place on Thursday before Easter, as usual (the weather being fine), in the open air in the court before the entrance to the Holy Sepulchre Church. Before eight o'clock in the morning the Latin and Greek monasteries by which the court is surrounded on three sides were full of people anxious to get a good view. Every roof was lined with spectators, while the windows of the church which command the court on the north side were equally crowded. The minaret of the adjoining mosque, known to the Arabs as "the Mosque of Omar," was entirely occupied by Moslem women, while the court of the church itself was filled almost entirely by Russian pilgrims.

In the centre of the court a raised wooden platform had previously been erected, with a divan on three sides, for the accommodation of the Patriarch and priests. It was surrounded by an iron railing, supporting at the east end a cross flanked by two discs, an emblem belonging to the Greek Church. The platform was also guarded by a line of soldiers, who preserved an open space round it two or three paces in width, and lined the path as far as the entrance to the Greek monastery. A small platform had also been constructed abutting against the wall on the east of the court, and facing the principal platform in the centre. Immediately over it was the branch of a willow suspended by a rope from the roof of the monastery.

Shortly before nine o'clock an archimandrite appeared and mounted this small platform. He was soon followed by twelve other archimandrites preceding the Patriarch, the latter dressed in vestments sparkling with gold, silver, and precious stones, and bearing his official rod surmounted by a small silver cross above two venomous serpents, also of silver. There were slight differences in the vestments of the various archimandrites, but all wore a red and gold cope, with the usual black Greek cap. Six of these dignitaries carried candles.

The procession was followed by four or five priests in black copes, who were to act as assistants. When all except the first mentioned archimandrite had ascended to the large platform, the Patriarch took the principal seat on the central divan facing towards the east. At his feet were a gold ewer containing water, and a silver basin, which had been prepared before the commencement of the ceremony. Close to these were placed some of the candles which had been brought in the procession, and lastly a bouquet of flowers. The side divans were occupied by the archimandrites, one standing, when necessary, to hold the Patriarch's book. The assistant priests,

most of whom carried towels in the procession, did not sit down, but remained holding them.

After a pause of a few minutes, the Patriarch and those around him rose while he read a passage from the Holy Scriptures ; he then turned and blessed the crowd below, and descending by himself into the court, knelt alone in prayer. This was to symbolise Christ withdrawing Himself from the disciples on the day before the Crucifixion. At the same time the first noticed archimandrite alone on the small platform, chanted a solo.

The Patriarch, having finished his prayer, re-ascended the platform, and a number of towels were wrapped round his waist and over his shoulders. Water was poured out into the silver basin, and he proceeded to wash the feet of the archimandrites. The basin was placed by an assistant before each in turn. The Patriarch, kneeling, washed and wiped the feet, and stooped to kiss them. At the same time the archimandrite seized and kissed the hand of the Patriarch. During this ceremony considerable excitement spread through the crowd, who threw up numbers of towels, handkerchiefs, etc., to be dipped into the now sanctified water, and returned. This was done for them by the assistants, who sometimes also sprinkled the water over the crowd.

It now appeared that each of those whose feet were washed represented one particular disciple, and the representative of Peter requested that not only his feet, but also his hands and head, might be washed.

The ceremony of washing was completed in about ten minutes. The little water then left in the basin was poured over the bouquet of flowers already referred to as being on the platform, and the Patriarch took his seat once more on the divan. The representative of St. John approached him to ask who was destined to be the betrayer, and Judas then stood out in full view. The other archimandrites in turn came forward, and either repeated or read a few words to the Patriarch, and the ceremony, having lasted about an hour and a-quarter, closed with a short eloquent sermon from the occupant of the small platform, to whom the crowd listened attentively.

The procession then returned in the same order in which it had come, and awakened much enthusiasm. The Patriarch was separated from the rest, and at one time it seemed that the soldiers would hardly be able to bear him through the mob. He carried the flowers on which the holy water had been poured, and with this he sprinkled and blessed the crowds who pressed forward to touch him. The struggle lasted until he was carried into the Greek monastery, the crowds who had no chance of coming near him being obliged to content themselves with clapping their hands and singing.

The corresponding ceremony of the Latin rite took place, with somewhat less pomp, inside the Church of the Holy Sepulchre, on the afternoon of the same day. Long before the appointed hour the door of the church was besieged by an eager crowd. The Moslem custodians refused, however, to open it before the arrival of the Latin Patriarch. Even the French Consul, who attends in an official capacity all the ceremonies of his Church, was not allowed to enter.

At half-past two, on the arrival of the Patriarch, the doors were thrown open, and all the positions which commanded any view were at once occupied. The washing was to take place in front of the entrance to the Holy Sepulchre, between the Chapel of the Angel and the Greek Church. Only a limited number of people assembled (perhaps because it was known that they would be locked in till 6 p.m.), but there were enough to make it difficult to approach the officiating priests. The congregation included a few Russian pilgrims.

A procession of about a dozen boys in red cassocks and white surplices, fifty priests, some wearing the white surplice, and lastly, the Latin Patriarch, in the vestments of his office, approached from the Latin sacristy, and took their seats; the Patriarch on a throne placed facing the tomb, and the priests on each side in several rows facing one another.

After a portion of Scripture had been read, the Patriarch kissed the missal, and was dressed with towels, while some water was poured out into a silver basin before him. There were thirteen men in the front row of benches, some being priests and some laymen, and of these the Patriarch washed the feet in just the same manner as is described above in the Greek ceremony. To each man, after washing his feet, he gave a small picture (some 6 inches by 4 inches) in a wooden frame, containing a representation of the cross, with an ornamental design of flowers on a white background. This was in most cases kissed by the recipient.

There was apparently no representation of the individual actions of each apostle.

After the washing more water was brought. The Patriarch washed his hands, and read some portions of Scripture. The service thus ended in about twenty minutes, and that of the Tenebræ at once commenced. The door of the church having only been opened for two minutes, we now found ourselves locked in. Prayers, chanting, and singing, continued till six o'clock, when the Patriarch gave the necessary order, and we were enabled to leave.

A. M. Mantell, *Lieut., R.E.*

A ZIKR CEREMONY.

In an inconspicuous building by the side of one of the back streets of Jerusalem, derwishes are in the habit of holding a religious ceremony, generally described by Europeans as "howling"—spoken of among the Arabs as a "Zikr." The sect whose rite I attended, are the followers of Sheikh Seyid el Bedawy, and in Jerusalem they hold the Zikr in a small mosque, rendered sacred to them by its containing the tomb of one of the most holy of their number—Sheikh 'Eed el Mughâribeh. On Sunday evening, some two hours after sunset, it usually takes place, and accordingly at about half past eight I was admitted into the court-yard in front of the

mosque. Some eight or ten men had already arrived, and were sitting smoking on carpets placed in the court-yard, waiting in almost absolute silence for the signal to commence. Through the low door of the mosque was just visible the Mihrâb, or prayer recess, before which the pious Moslem stands five times a day during his devotions. The floor of the mosque was covered with straw matting, and immediately in front of the Mihrâb a small piece of carpet had been placed for the principal sheikhs.

We had not been waiting long before six or eight of the derwishes entered the mosque, followed by attendants with drums and cymbals, and the ceremony commenced. Two sheikhs sat on the carpet alluded to above in front of the Mihrâb. One of these wore a clean white turban, which was in strong contrast with his long black jubbeh, or cloak. The other, in a grey cloak, wore the green turban—a sign that he was one of the descendants of the prophet Mohammed, or that he had made the annual pilgrimage to Mecca. A large drum was held by an assistant in front of these sheikhs while they repeated a short prayer. The assistant advanced one pace towards them, and they prayed a second time. He advanced once more, and they prayed the third and last time. This seemed to be an introduction to the Zikr itself, and after the third prayer, during which he knelt on one knee, the man who held the drum fell back behind the circle which the others had now formed. During these prayers it was noticeable that he stood with the right great toe pressed over the corresponding toe of the left foot, said to be an attitude of contemplation, the belief in which is shared by all sects of derwishes.

I now removed my shoes and entered the mosque to see better what was going on. The interior of the room was quite plain, with white-washed walls and roof. There was no pulpit. At the west end, however, a large tomb was visible—that of Sheikh 'Eed el Mughâribeh—covered with a green cloth, and ornamented with two flags. Some drums were hung on the walls near the tomb. A dim light was supplied by one solitary oil-lamp hung from the roof.

The Zikr now began in earnest, with the beating of drums and clashing of cymbals; of the latter there were three pairs, which were used in turn by different derwishes in the ring. Two of the drums, being large, were beaten by men standing up behind the ring; the remaining drum was much smaller, and could be managed by a performer who was sitting down. This music was exactly the same as that which is heard at time of the pilgrimage to the shrine of Moses, and on Mohammed's birthday, and other similar occasions. At intervals one or two of the number would break out into a loud and tuneless Arab song. Throughout the Zikr it was remarkable that they kept very good *time* with all the instruments, although there were numerous changes from slow to fast, and *vice versâ*: also the rhythm of the blows was constantly altered. It was some time before I discovered which of the number was acting as leader: they seemed to understand what alteration he wished from the slightest gesture, and only once was it necessary to say "soua, soua" (together, together), to bring them back to order.

The derwishes who formed the ring were at first only four in number, one being a Turkish soldier. Others came in one by one, and joined the circle, until there were as many as twenty. They did not appear to attach any importance to the exact number. Any member could leave the mosque or return just as he wished. Two children, a boy and a girl, sat down with the derwishes during part of the *Zikr*, and the kavasse from the British Consulate who was with me occasionally joined in. The derwishes themselves were not distinguished by any particular kind of dress. They did not wear the distinctive cap, cloak, and girdle seen in this country among the Maulawiyeh derwishes. Some wore the black jubbeh, and some a coloured one; while others only wore the striped vest or kaftán. Four of the number wore the green turban, while others wore a white turban or only a fez. The Turkish soldier was in uniform. It would therefore be quite impossible for the uninitiated to recognise as such a derwish of this order.

The performance on the drums and cymbals described above lasted some seven or eight minutes, becoming towards the end rather painfully loud. At a pre-arranged signal it suddenly ceased, and one of the derwishes was left singing a rude chant: after about half-a-minute he stopped, and another took it up. When three or four men had thus sung a prayer, the drum and cymbals re-commenced as before, having, however, by this time all changed hands. After a second performance on these instruments similar to the first, the chant was again taken up: the drumming and chant were then repeated a third time, and the instruments put away.

The only other circumstance that was noticeable up to this point, was the entrance of Sheikh Májid, the principal derwish present that evening. He walked round the ring saluting each in turn. First he covered his own face with his hands; then he placed his hands on the head of the derwish who was seated before him, and lastly he kissed the head of the latter. He did not thus salute the soldier, but bowed to him after taking the central seat on the carpet near the Mihráb. He wore the sacred green turban; he seemed to be the oldest man in the party (he was certainly the chief), and was perhaps 35 or 40 years of age. There were among them no venerable grey-bearded sheikhs.

After the removal of the musical instruments, the Zikr proper commenced. The word "Zikr" means "remembering" or "mentioning," and hence mentioning the name of God, which is accordingly done in the following formula—a statement of the unity of the Moslem deity—

"Lá iláhah illa lláh,"

that is to say, "There is no God except the God." This was repeated over and over again, with accents on the syllables as shown above, the derwishes nodding their heads backwards and forwards in time. After five or six minutes the motion became more rapid, and they turned the head alternately to each side in nodding. After some ten minutes of this repetition, they all stopped, and prayers were repeated in turn by various

derwishes, the names of Mohammed, Ali, Othman, and other celebrated Moslem saints being distinguishable.

Another repetition of the formula "La ilahah illa llah" then took place, followed by a prayer similar to the first.

Hitherto all had been sitting; they now rose and repeated "La ilahah illa llah," turning round as far as possible alternately to each side. At the same time it appeared to be of importance not to move the feet in the least degree, or to raise them from the ground. No other rule as to posture was discernible; no particular position was adhered to either for the head or the arms.

This was followed by a third prayer, and this prayer by a short but very violent Zikr. The sound certainly greatly resembled the barking of dogs, to which it has been frequently compared. No words could be distinguished; at the same time none of the men showed any signs of fatigue, or of a tendency to fall down in a fit, which is said sometimes to result from a violent Zikr. There were at the end sixteen men in the ring and four in the centre, all shouting at the top of their voices. This was the greatest number that mustered at any time throughout the evening.

This last Zikr ended as suddenly as it had begun, and all sat down. Sheikh Mâjid repeated a short prayer, to which they all answered "Amen" at the end of each sentence, and the religious ceremony was at an end, having lasted about an hour and three-quarters. Several of the derwishes kissed Sheikh Mâjid's hand, and left the mosque; the rest remained in their places, and coffee was at once brought in.

The formula "La ilahah illa llah" was pronounced at the rate of some thirty times a minute. The repetition was continued during three periods of about ten minutes each, and one period of about three minutes with greater rapidity. The formula was therefore repeated more than a thousand times in all.

Throughout the Zikr Sheikh Mâjid and those nearest him were much less noisy and demonstrative than the others. One of those next him held a rosary, and appeared during most of the time to be counting his beads; he not unfrequently passed his hands over his face and beard, as did also the others at intervals, after the different prayers. This is perhaps connected with the derwishes' custom of passing the right hand as if unintentionally over the chin, by which sign they recognise one another in public.

It appears that the derwishes of the Seyid el Bedawy sect hold a Zikr of this kind every "Monday evening," as the Arabs call it—since Monday commences with them at sunset on our Sunday—and they will even go through the performance at a private house if specially requested to do so by any of their friends.

A. M. M.

DÂJÛN, NEAR SITT NEFÎSEH.

The name Dâjûn applies to the ground immediately to the north of the shrine of Sitt Nefîseh (shown about four miles west of Ramleh on Sheet XIII of the 1-inch map). There are no ruins or other remains visible above ground. During the past year, however, the Fellahîn have discovered below the surface a number of stones suitable for building purposes, which they dig out and carry to the village of Beit Dejan. The name Dâjûn is in consequence well known in the neighbourhood. It was first pointed out to me as applying to a small patch of sand some six paces across, at a distance of 160 paces N.N.E. of the Welieh of Sitt Nefîseh. A few small pieces of sandstone were lying on this spot, but all the stones of any size had been removed. Several small pits had recently been dug close by, out of which the shepherds stated that building stone had been taken.

There is also a larger excavation, some 25 feet across by 10 feet deep, situated about 60 chains to the north of Welieh. From this a considerable number of stones must have been obtained. Mortar, small stones, shells, and pottery were lying about, the latter apparently not very ancient.

Some 100 yards further north again is an old pit about 10 feet deep and 25 feet across at the top. The sides and bottom are covered with grass. The shepherds consider it to be the Bîr or cistern of the old village of Dâjûn. Near this pit is a stone 4 feet square, partly buried in the ground, with one side still covered with mortar. It appears to be the only large stone on the site which has not been taken away by the inhabitants of Beit Dejan.

The shrine of Sitt Nefîseh is a quadrangle measuring 15 feet 4 inches by 14 feet 7 inches, enclosed by four walls, the bearing of two of which is 13 degrees west of true north. The north-west angle of the enclosure has been destroyed. There was originally a door in the north wall, but only the eastern jamb is now visible. The walls are of modern construction, 5 feet high and 21 inches thick, built of small stones covered with plaster. Each of the corners, which are still standing, is surmounted by a pyramidal stone about 20 inches in height. There is a mihrâb, or prayer niche, in the south wall inside the holy place. There is also a small niche in the north-east corner, intended, apparently, for lamps or offerings.

A. M. M.

SUPPOSED VILLAGE OF JETT, NEAR BEIT JIBRÎN.

It has been supposed that a ruin exists in the neighbourhood of Beit Jibrîn, known by the name of Jett, or some similar word, and representing the Biblical town of Gath. In riding from Latrûn to Beit Jibrîn I made

inquiries on the subject in the village of Dhikerîn, and in the country between Tell es Sâfi and Beit Jibrîn. During the following days I visited Beit Jibrîn itself, and also Kudna, Zeita, el Kubeibeh, ed Dawâimeh, Idhneh, Senâbra, Umm Burj, and Deir Nakhkhâs. In none of those places, nor in the intermediate country, was any name known containing the same radical letters as the word Gath. The nearest approach is in the case of Tell Judeyideh, shown on the map a little to the north of Beit Jibrîn.

It should be mentioned that, in almost every instance, the Fellahîn answered readily and correctly questions as to places marked on the map, so that it can hardly be on account of reticence on their part that the name has not been recovered.

A. M. M.

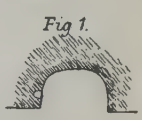
JERUSALEM.

The Bakoosh Hill.

22nd February, 1882.

On the 16th of this month Mr. Armstrong and myself, in company with Dr. Chaplin, made an excursion to the Bakoosh Hill, in order to examine the view from the top, and to ascertain what tombs were to be found in the neighbourhood. The first four figures on the accompanying plate show the principal rock-cuttings of various kinds that we came across. No. 1 represents a rough cave on the level of the ground, 7 feet broad by 4 feet deep, perhaps entirely natural. On the left, however, we saw a well cut niche (as shown in the figure) of about the size required for a lamp, 8 inches broad by 6 inches high by 4 inches deep. Only this one niche was visible, but in all probability the entrance to an interior chamber exists under the present level of the ground, as in the cave known as "Umm et Tâkât," at El Jîb. The tomb thus described lies on the north-east slope of the hill, at a distance of about ¼ mile north of the "Bakoosh Cottage," the residence of the late Mr. Finn.

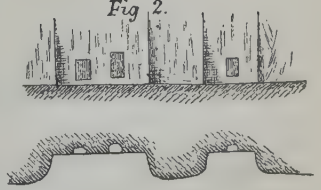
Fig 1.



Another cave, which is perhaps a similar tomb, was found on the saddle to the west of the hill.

On the south of the hill the rock is cut in the manner represented in Fig. 2. The surface is cut back, as shown in plan, in two places about 5 feet apart. In one of the recesses so formed two well cut niches were found (as shown in the plan and elevation). In the other recess there is one niche. The rock in this place runs

Fig 2.



north-east and south-west, so that the smoothed surface faces the south-east.

Due east of the hill, just below the Bakoosh Cottage, we found the tomb shown in plan in Fig. 4, consisting of two chambers, some 8 feet square and 6 feet square respectively, connected by a door. On entering the outer chamber a rock-cut passage is seen to the left 1 foot 6 inches broad, by 1 foot high. It is closed with stones, but is probably a koka, and runs in only or 6 feet.

Fig 3

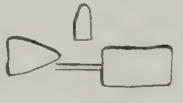
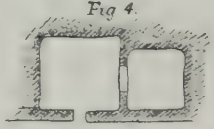


Fig 4.



Traces of a rock-cut wine-press are visible on the saddle to the west of the Bakoosh Hill, while on the top of the hill itself we found the cuttings represented in Fig. 3. The three pans are roughly cut to a depth of 18 inches or 2 feet, and are closed at the bottom with earth and stones. The smallest of the three might possibly be the entrance to a cistern. The surface of the rock in that on the left is rotten, the effect of water standing in it for a long time. The three circles in the right hand top corner of the figure represent rock-cut hollows so common on both sides of the Jordan, and sometimes used by the present inhabitants for the manufacture of gunpowder.

A careful examination of the whole spur, on the east slope of which the Bakoosh Cottage stands, did not reveal any artificial rock cuttings besides those above described. The tomb sketched by Mr. Finn in "Byeways in Palestine" is visible to the south, separated from the Bakoosh Hill and Cottage by a wâdy.

We found no foundations leading one to suppose the hill an ancient site, nor did we come across any coins or pieces of glass or pottery—the latter being especially common in the neighbourhood of old ruins.

We devoted some time to investigating whether the Mount of Olives is visible from the top of the hill. From the saddle (about ½ mile west of the cottage) referred to several times above, the Church of the Ascension and all the surrounding buildings are visible. From the top of the hill, however, they are hidden by the Beit Jâla ridge. It was, however, just possible to identify the Russian building (a trigonometrical point in the Survey) on the east shoulder of Olivet, the hill itself being indistinguishable.

A question has also been asked as to Rachel's Tomb. That too is invisible from the top of the Bakoosh Hill.

Khurbet 'Adaseh.

On the 20th of this month we paid a visit to the above ruin, and found there many signs of its having been formerly inhabited. On the south

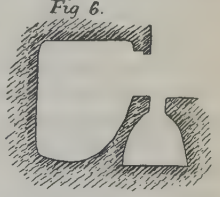
especially much work has been expended on the rock. In many places the cutting appears to be due to quarrying, but as the rock scarps are almost entirely hidden by soil, it is difficult to speak with certainty. In some places, however, the cutting was no doubt effected for the entrance to a tomb, as for instance that shown in Fig. 5. It seems probable that both a quarry and a cemetery exist on this slope of the hill. The entrance to one tomb is visible, but is closed with rubbish. No doubt many others have been cut in the vertical rock surfaces in the quarry, which extends roughly over an area 100 yards east and west, by 50 yards north and south.

Fig 5.

On the west of the hill near the top is a cutting in the rock 7 feet by 3 feet 6 inches by 3 feet 6 inches deep (Fig. 9). This is too large to be a rock-sunk tomb, and a channel leading into the cutting shows that it has been used for collecting rain water.

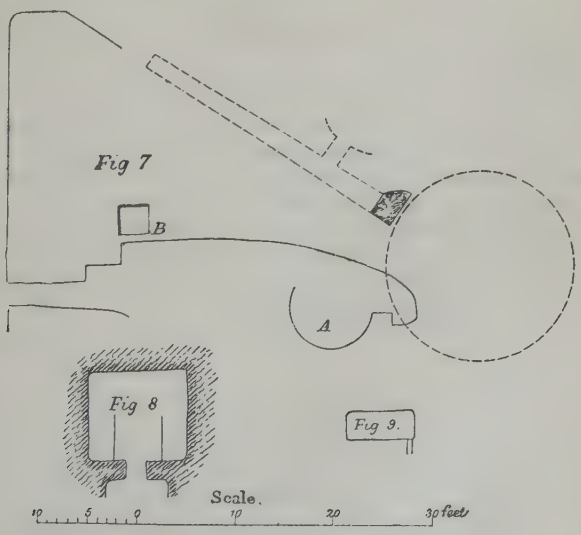
A well cut hollow in the rock, 10 inches across, was found not far distant.

Fig 6.



On the top of the hill we found the caves shown in plan in Fig 6. They are rock-cut and fairly well executed. They are below the surface of the ground, and one descends to them through a rough rock-cut shaft. On the right hand side, on entering the larger cave, a groove is cut to receive a door. A bolt-hole is still visible. The caves are partly filled with rubbish, and no kokim or loculi were to be seen.

Fig. 8 represents a tomb found on the east slope of the hill. At the



level of the present surface of the ground are seen traces of a bench on each side, as shown in the sketch.

There are a large number of cisterns on the 'Adaseh hill. A small cistern, 9 feet by 6 feet, is cut in the quarry on the south. Near the top of the hill is a large and remarkably well made cistern, shown as a dotted circle in Fig. 7. An underground aqueduct, 30 feet in length, is also shown in dotted lines. We were quite unable to understand its use. There is no connection between it and the large cistern, but a side passage leads to a second cistern, closed up, of which a small portion is shown by dotted lines. The aqueduct is cut in the rock to a depth varying from 4 feet at the part nearest the large cistern, to 10 feet at the end. The width is 1 foot 6 inches to 2 feet. The top is covered with slabs of stone placed across from side and covered with stones and earth. The sides are covered with good cement, containing small pieces of charcoal and pottery, to a thickness of $2\frac{1}{2}$ inches. The slabs are removed at the end nearest the cistern, and from this point the aqueduct is entered. The other line in the figure represents cuttings in the rock on the surface. At A part of a cistern is visible. At B is a square chamber, perhaps for collecting water. At a few yards distance we found traces of another cistern, lined with good cement, containing large pieces of pottery and also charcoal.

Among the ruins at the top of the hill are the mouths of several closed cisterns, while the Fellah who took us round pointed out several other places where he said cisterns had been found and closed up.

On the south slope is a birkeh, or reservoir, 51 feet 6 inches by 37 feet 6 inches, partly rock-cut, partly masonry, and near it three large cisterns. On the north of the hill the corner of another birkeh is visible. The sides are covered with earth, so that it could not be measured, but its size must be about 40 feet by 20 feet.

The ruins at the top of the hill include the foundations of a building or tower, 13 paces by 12 paces.

Other foundations and heaps of stones are seen all round. Several pieces of columns of pink and grey limestone, and some well cut stones, show that a building of some importance once stood here. Several wine-presses may be seen in the rock surface. We found a piece of tesselated pavement, containing six or eight tesseræ, and an ornamented piece of pottery. The ground among the ruins is covered with chips of pottery.

There are no springs at Khŭrbet 'Adasah, the nearest being at El Jîb, distant $1\frac{3}{4}$ miles, but the tombs, cisterns, and other indications, show that the present ruin marks an important ancient site.

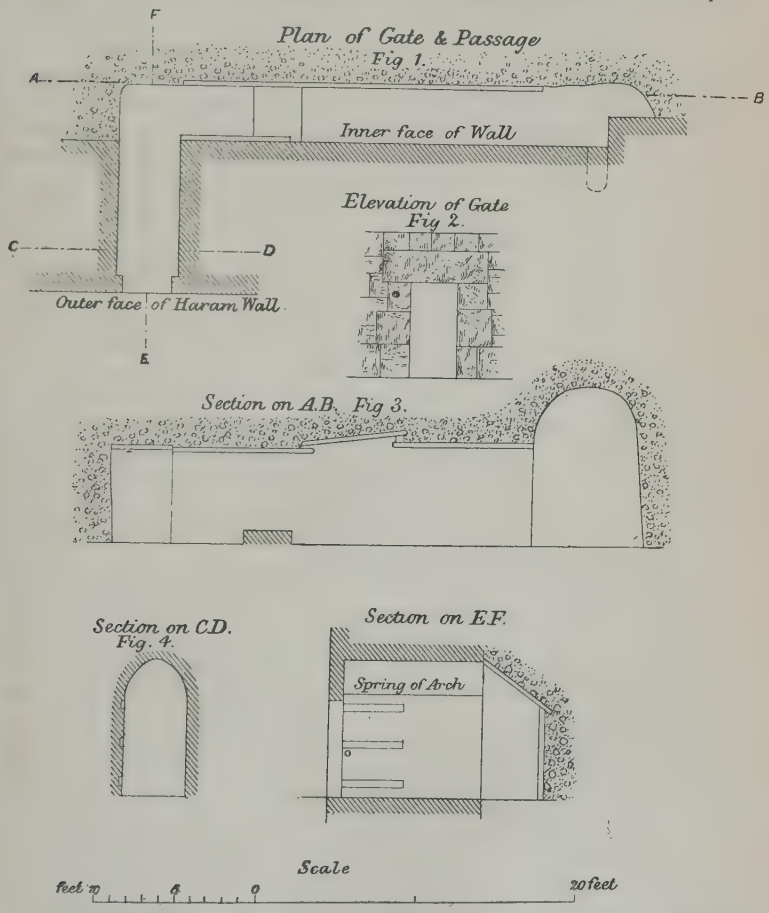
A. M. M.

JERUSALEM.

Newly opened Gate in the East Wall of the Haram.

Jerusalem, *3rd March*, 1882.

In the last number of the *Quarterly Statement* reference is made (p. 18) by Mons. Clermont Ganneau to a gate in the East Wall of the Haram, which the Turkish authorities have recently opened at his request.



According to instructions given by Captain Conder, before his departure for Constantinople, I forward plans and sections showing the condition in which the excavations have now been left.

Fig. 1 in the accompanying plate is the plan. The thickness of the

wall is 9 feet 6 inches, and through it a passage is built 3 feet 9½ inches in width. Fig. 4 shows the cross section of this passage. The height is 6 feet 7 inches to the spring of the arch, which is formed of seven voussoirs in all, the key-stone being smaller than the side voussoirs. The height in the centre is 8 feet 6 inches, so that the rise of the arch is just half the span. It is, however, not semicircular, but slightly pointed, as represented in the figure.

Fig. 5 shows the longitudinal section through the passage. At the eastern face arrangements have been made for a door. The three horizontal grooves are presumably intended to leave space for the bolts in opening and shutting the door—an arrangement sometimes followed at the present time. On each side also is seen a hole for hinges or bolts, one being represented in the figure below the central horizontal groove.

Fig. 2 shows the appearance of the door from outside. The opening is narrower than the passage itself (being 6 feet 1 inch high by 3 feet broad), and is surmounted by a lintel-stone 6 feet 6 inches by 2 feet by 10 inches thick. The size and arrangement of the adjacent stones are shown according to actual measurements.

The left (southern) jamb of the door is 257 feet from the south-east corner of the Haram.

With the exception of the lowest course, the masonry within the gate and on the inner surface of the wall consists of well cut undrafted stones, 1 foot to 2 feet 6 inches in length, in courses from 1 foot to 2 feet in height. The materials of the lowest course, however, are evidently more ancient; the stones are much larger (the dimensions of two of them being 4 feet 6 inches by 3 feet 8 inches, and 4 feet 9 inches by 3 feet respectively), and show signs of a marginal draft with a much worn rustic boss. One side of the passage is partly covered with good white mortar, with tool marks on the surface resembling arrow-heads, intended either to be ornamental or for the reception of another layer of plaister.

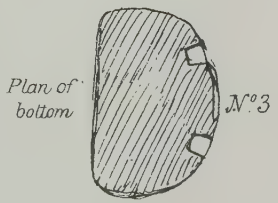
After reaching the inner face of the wall the excavators ran a gallery northwards under the surface of the Haram for a distance of 29 feet. The earth through which it runs consists of stones (some 6 inches to 1 foot across) and rubbish, and is supported by woodwork, one side of the gallery being formed by the wall itself. It is here that the interior course of more ancient material referred to above has been laid bare. One stone projects from the floor of the gallery, as may be seen in section in Fig. 2, but the rest of the floor is apparently earth. At the north end the ground plan of the wall is as represented in Fig. 1. The dotted line at this point shows a closed up drain, or the vacant space left by removing one of the lowest stones in the wall.

The work has now been left some months, I believe, *in statu quo*, and the Turks do not at present show any intention of continuing their investigations further.

A. M. M.

This door is probably not older than the 15th century at earliest.

C. R. C.



HARRISON & SONS, LITH. ST . INS LANE, W.C.

JERUSALEM, 13*th June*, 1882.

In the winter from 1880 to 1881, many of the outer stones of the eastern wall of the Haram Esh Sherif, near its south-east corner, fell down: some smaller pieces followed last winter; and in order to avoid the entire falling (except the large ancient parts) it was now absolutely necessary to repair. So the upper part—not only what stood higher up above the ground inside, but a good deal downwards—on both sides (east and south) at the south-east corner, was taken down, so that the place called the "cradle of Christ" became towards east quite open, and partly also in south. By this work last week a curious stone figure was found, and brought into the Serai (into the office room of the Pacha), where I had an opportunity of seeing it, and of making a sketch and taking the necessary measurements from it. It is of green marble, now broken in two pieces: the head is loose, but when I put it on the body it fitted exactly (the breakages I have shown in the two sketches); the nose on the head is also broken off, and is missing, as it was not found at the spot. The two eyes are preserved very well, but are not human ones—they are put rather on the side of the head than in front, and are standing unusually far one from the other, so the face cannot have been a human one; there is also not any trace of a beard. So I suppose the nose was a bill or beak (of a bird) probably, as I have pointed it out by dotted lines—the (inner) ending of it; and so the situation of the mouth is on one side preserved as I have shown in Fig. 2. But might it not have been the mouth of a fish? only then it would have been situated curiously. Over the whole body are feathers—as I think, or as my companion thought, fish scales—each feather marked with two curves thus, . On the neck of the figure is a double band, on which hangs a medallion by a three-fold ring. On the medallion are two letters—as I think the figures are—in relief. On the occiput is a square hole, in which once metal was fastened, and also two such holes on its foot, of which I show the form (in Plan No. 3). So it is clear nothing is missing on the foot, but all complete still, although in some way curious. I heard that the Pacha had ordered some sketches to be made from it, which he had sent to Constantinople, and is now waiting for direction what he is to do with the figure. It seemed to me that a cast should be taken if possible, if it remains long enough here, and permission can be got.

C. SCHICK.

LIST OF PHOTOGRAPHS

Taken by Lieutenant A. M. Mantell, R.E., in 1882, for the Committee of the Palestine Exploration Fund.

1. *Makâm at 'Ain Hesbân.*

This Makâm, or sacred place, situated near Hesbân (the Biblical Heshbon), is one of a class very numerous in Eastern Palestine. It consists of a low wall, roughly built in the form of a circle seven or eight paces in diameter, round the tomb of some Sheikh. On the west is a construction similar to a cromlech, but much smaller, consisting of a stone some 2 feet long, taken from a neighbouring ruin, and supported at the end on two other stones placed vertically. A door is thus formed about 2 feet high by 2 feet wide. The Bedouin, not having any mosque available, pray at such a shrine, first placing on the door described above some small offering such as a berry from a neighbouring bush or a piece of metal.

All the modern sacred stone circles are formed on the same principle, but in some cases the door is on the south. They correspond to the Kubbeh or domed building frequently seen in Western Palestine. Ploughs and other implements are left in them for months when not required for use; it is considered that no thief would steal them from such sacred places.

2. *Cromlech west of Hesbân.*

This is the finest specimen of the 700 or 800 cromlechs found by the Survey party east of the Jordan. It consists of two side stones, a top stone and a floor stone, as may be seen in the photograph. The figure on the left is Goblân en Nimr, Sheikh of the Adwân Arabs, a man over six feet in height. This gives a good idea of the cromlech.

It is still an open question for what purpose these pre-historic monuments were erected. Although in some parts of the world they have been used as tombs, Captain Conder, in the *Quarterly Statement* for April, 1882, has given his reasons for supposing that those found in Moab were never used for such a purpose. From the arrangement of the top stone, and from the peculiar cuttings often found on its surface, he concludes that they were only intended for altars. The prevalent idea among the Arabs is that they are inhabited by ghouls.

3. *Cromlech west of Hesbân.*

This is another fine specimen situated within about twenty yards of the above.

4. *Cromlech west of Hesbân.*

In this instance the top stone is only slightly raised above the ground, but an examination on the spot leaves no doubt as to its being an artificial construction.

5. *Cromlech west of Hesbân.*

Similar in construction to No. 4. The Arab sitting near the cromlech is Sheikh Goblân.

6. *El Kalû'a in Wâdy Hesbân.*

A remarkable group of limestone rocks in the valley running westwards from Heshbon. They have a strong reddish tinge, and from a distance show a castellated form, which makes it difficult to believe that they are not artificial. This is indicated by the name "Kalû'a" or "fortresses." On a near approach, however, their appearance entirely changes, and they prove to be only natural crags.

7. *Makâm at Hadânieh in Wâdy Jideid.*

This is similar to that shown in photograph No. 1. The offerings on the lintel of the door can be well seen, and are in this instance very numerous, including berries, shells, coins, a stick, pieces of iron, and the lock of a flint gun. It is remarkable that this small makâm is within a few yards of a large ancient stone circle 80 yards in diameter, with wall 30 to 40 feet thick. Of the latter the Arabs cannot give any explanation. It is situated on a spur immediately above a good spring, and there are many cromlechs in the neighbourhood. Captain Conder considers the large circle to mark the sacred centre round which the cromlechs were built.

8. *Stone Circle and Altar at Minyeh.*

The part of this construction apparently intended for an altar, is a large stone about $2\frac{1}{2}$ feet by $1\frac{1}{2}$ feet, by $2\frac{1}{2}$ feet high, surrounded by a circle of roughly squared stones six paces in diameter. On the east another similar circle intersecting the first forms a sort of courtyard, in which the worshipper might stand facing the altar. This and six other such constructions stand on the bend of a hill overlooking the Jordan valley just above the spring at Minyeh. There is another also in the Jordan valley among the cromlechs near Kefrein. The Bedouin do not know for what they were intended.

9. *Rock-cut Tomb at el Kalif.*

The entrance to this tomb is surrounded by a well executed rock-cut pediment finer than that at the tombs of the Judges near Jerusalem. In front of the entrance is a courtyard reached by steps. The tomb chamber is at a lower level, and reached by a shaft. It is 20 feet square by 9 feet in height. On three sides there are benches for corpses, with rock-cut arcosolia.

Some 200 yards to the east is another rock-cut tomb containing ornamented sarcophagi. The style of ornamentation shows that these tombs date from about the second century A.D.

10. *Public Building at 'Ammân.*

'Ammân marks the site of the Biblical Rabbath-Ammon, and contains to the present day the remains of many Roman buildings, of which one of the best is that shown in photograph No. 10. Only a few columns and one gate are still standing, and it has been supposed that these represent the Ancient Forum. A column in the foreground shows a number of Arab "tribe-marks" which the Bedouin frequently inscribe in conspicuous positions, either for good luck or to record their opinion that the place belongs to them.

11. *Kabr es Sultan at 'Ammân.*

This photograph shows the façade of a fine Roman tomb on the east of 'Ammân. There are various interior chambers for the reception of sarcophagi. The Arabic name signifies "the tomb of the Sultan."

The monument dates probably from the second century A.D.

12. *Odeum at 'Ammân.*

This is the smaller of the two Roman theatres at Rabbath-Ammon, and must have been used for the acting of plays; while the largest one, which is in an excellent state of preservation, was used for entertainments in which wild beasts were exhibited.

13. *North Gate of Public Building at 'Amman.*

This is a view taken from the north (*i.e.*, outside the building) of the gate which is seen in the distance in photograph No. 10.

14. *Church at 'Amman.*

A Byzantine building of which the apse is in a fair state of preservation. An inscription found in one of the walls by the Survey party appears likely to give very closely the date at which the church was built.

15. *Kusr en Nueijis north-east of 'Ammân.*

A finely ornamented Byzantine building, intended for the reception of sarcophagi. The Ionic capital and some other details of the order are visible in the photograph. The roof bears a Roman sepulchral vase.

16. *Tomb Tower west of 'Ammân.*

Similar to that in the preceding photograph.

17. *Public Building and Bridge at 'Ammân.*

This view is taken looking down the fine stream at 'Ammân, which flows finally into the Jabbok. On the left we see the outside of the building, of which a special view is given in photograph No. 18. In the distance is one of the Roman bridges which cross the 'Ammân stream.

consists of a single span, still in perfect preservation, and gives access to a street bordered with columns leading to the two Roman theatres.

18. *Public Building at 'Ammân.*

This photograph shows the part still standing of some fine Roman building, probably baths, of which an exterior view is given in photograph No. 17. The three apses are well preserved nearly to the top, as also are a number of the columns. The rows of holes seen in the stones of which the wall is built were probably used in covering the surface with tiles or metal plates, but none of the plates themselves were found by the Survey party.

19. *Kusr es Seb'ah south of 'Ammân.*

This is the best preserved of the tomb-towers near 'Ammân, and is similar in general arrangement to those in photographs 15 and 16. It measures externally 23½ feet by 23 feet, and is entered by a door on the north. There are ten sarcophagi inside the towers arranged round three of the sides in two layers. Several of them are ornamented with wreaths, and one with a cross. All that the Arabs have been able to open have been rifled, but there are still four which seem to have been undisturbed, and might repay examination. Several sarcophagi stand in conspicuous positions on the slopes of the hills in the neighbourhood of the Tower.

20. *Temple at Khareibet es Sûk, south of 'Ammân from the east.*

The photograph shows two rows of columns with Ionic capitals still standing among the ruins of a very considerable town. There was originally a gate, on the east of which one finely carved jamb is still *in situ*, and can be seen in the photograph.

The columns have been much damaged by the weather and shaken by earthquakes. Several shafts and capitals are lying about within the external foundations.

21. *Temple at Khareibet es Suk, south of 'Ammân from the west.*

A different view of the same subject.

22. *Tomb-Tower near Khareibet es Suk.*

This is situated a few hundred yards to the east of the Temple. It is nearly 40 feet square in plan, and is therefore considerably larger than the other tomb-towers near 'Ammân. The walls are lower than in other such buildings, and are provided with a cornice and a plinth. The tower is not roofed in. The interior is filled with earth, stones, and rubbish, so that no sarcophagi are visible, but there are two lying on the ground outside.

Outside the west wall an arch has been built as in the photograph. It is not bonded in with the rest of the masonry, and would appear therefore to be more modern. It is not clear with what object it can have been constructed.

23. *Odeum at 'Ammâm. Interior Door.*

A view from the inside of one of the entrances to the small theatre shown in photograph 12.

24. *Cromlech North-west of 'Ammân.*

A fine example of a cromlech, and remarkable for its being composed entirely of flint. A second cromlech can be seen in the distance.

25. *Interior of Sassanian Building in 'Ammân Citadel.*

This photograph gives some of the details of a building which has been an architectural difficulty to various explorers. Captain Conder has recently suggested that it is of Sassanian origin, of about the same date as the great palace discovered by Canon Tristram at Mashita. He finds also that there is a close resemblance between the details of this building and those of the Dome of the Rock in Jerusalem, and considers that it will throw much light on some of the most disputed points in Syrian architecture.

26. *Entrance to Rock-cut Chamber at 'Arâk el Emîr (showing inscription).*

This is the entrance to a very fine chamber cut in the cliffs at 'Arâk el Emîr. The chamber is some 60 feet long by 30 feet broad, and 30 feet high, and was evidently formed with much care. It is now used as a store for "tibn," or chopped straw. The inscription on the right hand side is Hebrew, and is thought to date from the second century B.C. Although the letters are remarkably well cut, the translation is still a moot point: in fact, it is not certain whether it should be read from right to left, or *vice versâ*. De Vogué, reading from right to left, translates it "'Arniyeh," but cannot suggest any very probable meaning. If read like European languages, from left to right, it may be construed to mean "Tyrus," the ancient name of 'Arâk el Emîr.

27. *Rocks at 'Arak el Emîr.*

A remarkably fine range of cliffs, visible for many miles to the south. It is 600 yards in length, extending north-east and south-west, the height in the centre being 80 to 90 feet. The name of the place (ancient Tyrus) is taken from this cliff, and signifies the "Princess Rock."

28. *Kusr el 'Abd at Arâk el Emîr.*

This building, called by the Arabs "the castle of the slave," is a palace constructed by John Hyrcanus in the second century B.C. It was probably never finished, but the general design has been drawn out by De Vogué from the existing ruins. The stones (some of which are larger than any in the Jerusalem Haram) were brought down on a causeway from the cliffs shown in photograph 27. Perforated stones were firmly embedded in the

causeway, probably to assist in this engineering operation. One of these appears in the photograph.

The animals carved on the upper course of stones are supposed to be lions. They are mentioned by Josephus, and this reference leaves no doubt as to the identity of the present ruin with the palace of Hyrcanus.

A. M. M.

THE ROCK RIMMON.

To the Editor of Palestine Exploration Fund Quarterly Statement.

In your last *Quarterly Statement*, the Rev. W. F. Birch so winnowed with his critical pen Captain Conder's communication *in re* the Rock Rimmon, that I am left with a very little wheat and a great deal of chaff. I have no wish to be drawn into controversy, but should like to silence for ever any insinuations that the name Rummar, or Rummân, which was obtained by me from the Fellahin of Jebâ, when visiting the cave "Mughâret el Jâi," was the result of my first letting them know the place I wanted, and then, in the Eastern fashion, finding it given to me.

Mr. Salami, the Vice-Consul of Jerusalem, knew a thing or two about the Fellahin mind, and as we rode together to Jebâ he more than once said to me, "Whatever we do we must not give the shepherds a notion of the names of the cliffs or caves we wish to know about." And this caution was most conscientiously acted upon the day we explored the Wâdy Suwēinit, entered the cave, and heard the name Rummân, in the valley of Michmash.

H. D. Rawnsley.

THE BODIES OF THE PATRIARCHS.

Dear Sir,—I see in yesterday's *Times* Lieutenant Conder lately visited with the Princes the mosque at Hebron. I should like to point out, as a matter for discussion in the *Quarterly Report*, that the bodies of the patriarchs, with Jacob—if not those of Abraham, Sarah, Isaac, Rebekah, and Leah—were transferred from Hebron to Shechem. (*See* Acts vii, 15, 16.) No reason for the removal is assigned, nor the time when it took place. Still, the fact is undoubted, though commonly overlooked. Could not search be made at Shechem for the spot to which the patriarchs were thus, as S. Stephen says, μετετέθησαν?

Yours faithfully,

Clericus.

SILOAM TUNNEL.

I.

One Thousand Cubits.

Captain Conder's interesting discussion of this question in the *Quarterly Statement*, April, 1882, may lead to important results, of which he can form no conception. I think he has satisfactorily settled the question as to the actual spot where the two excavating parties met, which appears to be in the exact spot where I predicted the place of junction would be found.

> "Now if there be any likely spot where the two gangs met *it will be at this high cutting* (4 feet 6 inches) . . . . Where we find this space of enlargement at the middle of an aqueduct, there is the spot where they endeavoured to meet."—*Quarterly Statement*, October, p. 295.

And the printed statement of Captain Conder indicates that the point of junction was exactly *where it had been predicted.* I am sorry to find in this last published statement so erroneous a statement of my theory of the Siloam tunnel as is given in the following passage :—

> "Unfortunately Mr. Beswick's calculations, which reduces the length of the tunnel to 1,478 feet, is founded on a misconception (*Quarterly Statement*, October, 1881, p. 295), as the length of the branch from the Virgin's Fountain *is not included* in the total of 1,708 feet."—*Quarterly Statement*, April, 1882, p. 127.

Unfortunately this misconception is in the mind of Captain Conder. My calculations do not reduce the tunnel to 1,478 feet, nor has he included the length of the branch from the Virgin's Fount in the total of 1,708 feet. I am fully aware that the Siloam tunnel is estimated from the place where it enters the cross passage to the Virgin's Fount, and that this cross passage of 50·8 feet in length is not included in the total length of the Siloam tunnel, 1,708 feet. My calculations begin where the tunnel enters this cross passage, and where the 1,708 feet of length begin. And my theory is, that for 231 feet, where the tunnel begins at the cross passage, the tunnel forms an eastern or upper branch of large bore or broad gauge, 6 feet high ; it then changes its course, and turns south ; at the same time and place the tunnel changes its character, and becomes a southern branch of narrow bore and gauge.

Am I right in stating that the upper or eastern branch of the aqueduct, which begins at the cross passage to the Virgin's Fount, is of large bore and gauge, so large that a man 6 feet high can walk erect therein ? And am I correct in stating that the lower or southern branch, from end to end, is a narrow bore and gauge, almost too small for a man to pass through? Its highest point, 4 feet 8 inches, is in the middle of its length, exactly at the

place where *I predicted* the point of junction of the two gangs of men would be found (*Quarterly Statement*, October, 1881, p. 295). With this single exception, the whole length is a remarkably narrow bore from end to end. I claim that the whole of this bore, or southern branch of the tunnel, is the only portion that the tablet-maker meant to be included in the 1,000 cubits mentioned in the inscription of the stone tablet. In short, I divide the Siloam tunnel into two branches, upper and lower, or into southern and eastern branches. The eastern branch is a broad bore and gauge, 231 feet in length ; the southern branch is a narrow bore and gauge, 1,000 cubits = 1,477 feet in length ; and the total length being 1,708 feet from the Siloam Pool to the place where the tunnel enters the cross passage to the Virgin's Fountain. I do not see how any one can misapprehend this simple and concise statement.

Let us examine the inscription more closely. It says, "And there flowed the waters from their *outlet* to the Pool for a distance of 1,000 cubits." The 1,000 cubits is measured from the "*outlet* to the Pool." The Pool we know, but where is the "outlet?" It cannot mean the *beginning* of the tunnel, for that would be the "inlet" and not the "outlet." The word in the tablet is well known, and its meaning determined : it never refers to the beginning nor the end of a passage, but always to the length or course of the passage. And this fact settles the question, that the 1,000 cubits is not to be measured from the beginning of the tunnel, but to some point in its course. When Hezekiah stopped the "watercourse" (2 Chron. xxxiii, 30) of the fountains this word was used in the original Hebrew, מוֹצָא *motza*. It is always applied to the watercourse, passage, tunnel, or goings-forth, but never to the ends of a tunnel. The word "outgoing" is more expressive of the actual meaning of the word than the word "outlet," which Professor Sayce has given to it. As in the Psalms (lxv, 8) : "Thou makest the *outgoings* of the morning," where the Hebrew is *motza*. In this case, as in every other, the word cannot be applied to the beginning of the day, but to the course of the day *from the morning*—its outgoings during the day.

The radical meaning of the word is to press, squeeze, make narrow, tight passage, to squeeze through, to make straight. The Arab is ماض *maaza*, to press tight and squeeze, as when the hands rub corn. And I cannot see any other inference to be drawn from the meaning of this word in the tablet than this : that it refers to that length of the tunnel which is emphatically a narrow bore, a tight passage, a straight place, to be squeezed through if you get through at all. This is its radical and common meaning—the length of the passage, and not to one of its ends. It seems to say, when a free translation is given :

> "The waters flowed from (תְּמוֹצָא) the *narrow bore* to the Pool for a distance of 1,000 cubits."

Just as the persecutors are overtook between the "straits," מֵצַר, *metzar*, (Lam. i, 3) ; *see* Job xxxvi, 16 ; xxxvii, 10. This narrow bore, or straitened passage, is the only part of the passage to which the tablet-

maker could apply his measure of 1,000 cubits—from the beginning of the narrow bore to the Pool: so that the proof seems complete, that the 1,000 cubits is the measure of this narrow bore, or lower branch of the tunnel.

II.

The Tablet-Maker's Cubit.

Captain Conder briefly alludes to the inscription, line 2, in relation to the "*three cubits*" to be broken through when the excavators first met at the place of junction. And he remarks, "the party at *d* were just *three cubits* of 16 inches from them." It is unfortunate that the actual distances of the sides and set backs at this place of junction were not taken with some degree of careful precision, or if taken, that they were not given except by way of inference, which would be, in a general or random way = 48 inches. Had the exact distances been given or taken, carefully measured without regard to theory, we could have used them as valuable factors in settling the value of the cubit.

Again, in the last line of the inscription we read, that "three-fourths" of a cubit was the height of the rock over the head of the excavation. If this be the correct reading, then the difference of height of the two channels at the point of junction would be—

inch cubit			inches
16·000	×	·75	= 12·000
17·724	×	·75	= 13·293
18·000	×	·75	= 13·500
21·000	×	·75	= 15·750

Captain Conder admits "the difference of height of the two channels at the point of junction is just 13 inches, or close upon *three-fourths* of a cubit of 16 inches." How much closer it would have been to a cubit of 17·724 inches, such as I suggest, had a very close measurement been made, it is difficult to say. But if this measurement of *three-fourths* of a cubit = 13 inches, then 3 cubits ought to have been 52 inches instead of 48. Then, again, admitting the diagram produced by Captain Conder, and using it as a guide, the distance between the workers being "yet three cubits to be broken through," as stated by the inscription, that distance would be represented in the *inscription* by the following words :—

(Line 3) "The excess of rock on the right. They rose up . . . . they struck on the west of the—

(Line 4) excavation, the excavators struck, each to meet the other "pick to pick."

Both gangs of men seemingly worked on this excess of 3 cubits, and struck the excess of rock, each to meet the other, pick to pick. Therefore, if *e* in the diagram be the point of junction, the space between them would

be that which lies between the set back at *d*, where the excavators have struck and cut the rock "on the west of the excavation." But the diagram itself shows clearly that the intervening space so struck is over 52 inches. If both gangs struck the rock of 3 cubits, as the tablet says they did, "each to meet the other pick to pick," then the intervening space would be from the set back at *f* working up stream, to *d* working down stream, and meeting at *e* the point of junction. The intervening space would then be "three cubits" of 17·724 inches = 53·172 inches. For the slight set back down stream at *e* is less than 24 inches from the set back *f*. The total space between the set back at *f* and the set back at *d* is nearer 53 inches than any other figure. Captain Conder assumes: "The party at *e*, in the meanwhile, seemed to have stopped working, which they would naturally do, to avoid injuring or being injured by the others." But this is opposed to the statement in the inscription, which says, "the excavators struck, *each to meet the other* pick to pick," after they had found out there was but 3 cubits between them. It seems more likely that the excavators forming the down stream party worked from *f* to *e*, and the up stream party worked from *d* to *e*, where both met at *e*, the point of junction. Both parties would be too eager to meet for one of them to stand still, with 3 cubits of solid rock in front of them.

I am fully prepared to enter into an elaborate test of the actual length of the cubit measure in use in and around Jerusalem during biblical times, and during the time of Herod. But the present is not the proper time, and space in this *Quarterly* will not permit it. However, the following cases being of a purely topographical character, and the main factors having been furnished by the Ordnance Survey, may be cited with confidence and profit, independent of their importance and interesting nature.

III.

Test Cases.

Case I. The large foundation stone in the south-east angle of the Haram was sunk into the rock at a level of 2,272·25 feet above the Mediterranean. This is generally regarded as the chief foundation stone in the substructures of the Haram, and probably was the first stone laid in the structure. Now add 100 cubits to its height, and you obtain $100 \times 1{\cdot}477044 = 147{\cdot}7044$ feet. Hence:—

$$2{,}272{\cdot}25 + 147{\cdot}70 = 2{,}419{\cdot}95 \text{ feet.}$$

And you obtain the exact mean level of the Haram. The Ordnance Survey gives 2,420 feet as the general level of the Haram area. Colonel Wilson, in his Ordnance Survey Notes, and in all the maps (*Quarterly Statement*, January, 1880), gives 2,420 feet as the general level of the Haram. Captain Warren, in all his works, gives 2,420 feet as the general level of the Noble Sanctuary. Captain Conder, in all his works, follows suit with 2,420 feet as the general level. Indeed this factor has never been

questioned, and has obtained universal acceptation. And yet, according to my estimate of the true value of a cubit, 100 cubits is the exact difference between the level of the substructural foundation and the general level on top of the substructure.

Case II. Josephus describes the general height of the Gentile or outer Court, which was about equal to that of the general rock level of the Haram as we find it to-day, namely, 2,420 feet. He says :

"The lowest part of this Court [Gentile] was erected at the height of 300 cubits, and in some places more."

Now 300 cubits would be equal to $300 \times 1{\cdot}477044 = 443{\cdot}114$ feet. All the heights of Moriah and Ophel and Mount Sion have their ravines and depths drawn together at only one point, a deep well south of the city called Bir-Eyub. The united ravines come together here. It is the lowest level to them all. Its rock surface has a level of 1,977 feet, with a general surface level all round of 1,979 feet. Let us now estimate from this lowest level of the ravines around the Haram, and add the height given by Josephus, namely, 300 cubits, and we obtain the following result :—

$$300 \times 1{\cdot}477044 = 443{\cdot}114 \text{ feet.}$$

$$1{,}977 + 443{\cdot}114 = 2{,}420{\cdot}114 \text{ feet.}$$

And we again obtain the general level of the Haram, or of the lowest height of the Courts in Herod's Temple, *as stated by Josephus.*

The real test of any value given to the cubit is best seen in large values, where the error, if any, is magnified to a degree to make the erroneous estimate palpable. In small quantities of a few cubits the error is so insignificant, that the difference is usually attributed to carelessness in the workman, or the slack use of round numbers and measurements by the engineer and constructor, as if they were never very particular. But magnify the distance to 50 or 100 cubits, and the error then increases into yards and rods.

Case III. In 1 Kings vii, 2, we read of Solomon building his palace 100 cubits in length. And in verse 6, he is said to have built a porch in front of the palace. Its length across the front of the building was 50 cubits, and its depth or breadth 30 cubits, making a total length of 100 cubits, and a breadth of porch of 30 cubits = 130 cubits total length.

Now, if we admit that the Royal Palace was built on Mount Moriah, along the length of the south wall, where Herod placed his Royal Triple Cloisters, the substructural foundations must have been of the same extent. Let us see what evidence exists. The value of 130 cubits = 192 feet.

$$130 \times 1{\cdot}477 = 192 \text{ feet.}$$

The original passage of the Triple Gate terminates at a distance of 19 feet exactly. And at very nearly the same distance from the Double Gate, the original double tunnel terminates. And in the plate given in "Recovery of Jerusalem," Captain Warren has marked the total length 192″ 0′, or 192 feet and a fraction less than an inch. The proof which this result furnishes of the original substructures being equal to the length of the Royal Palace and porch of Solomon, cannot but be regarded as interesting and valuable to our topographical knowledge of Ancient Jerusalem.

I am prepared to supply important test cases by the score, of great topographical interest, in and around the Haram, in illustration of the true length of the cubit, which I estimate at $\sqrt{3{\cdot}14159} \times 10 = 17{\cdot}724$ inches. And it seems to me very likely that this narrow bore, forming the southern or Siloam branch of the aqueduct of 1,000 cubits = 1,477 feet, is a confirmation of that estimate.

Strathroy, Ontario, Canada. S. Beswick.

I am sorry to have misunderstood Mr. Beswick's view as to the tunnel. He, however, appears to suppose our survey of the tunnel to be much rougher than is really the case. Every offset has been carefully measured within an inch or so, and the whole of the passage has been carefully planned from a chain and compass traverse, which can be consulted for any measurements required. The bore of the tunnel, from end to end, is nearly uniform, but the height varies constantly in different parts; as a matter of fact, the southern part of the tunnel is much the highest (12 to 16 feet). The cross passage to the Virgin's Pool is low (about $2\frac{1}{2}$ feet). The section (*Quarterly Statement*, April, 1882, p. 123) gives a general idea of the heights along the canal.

The statement I have made as to the "three cubits" was not either general or random, but founded on the traverse, which can be published if necessary. There is no distinct alteration of the tunnel at 231 feet from the north end, either in gauge or in height. The exact distances were taken carefully without regard to theory, as we have no theory to support in the matter. Mr. Beswick's "Test Cases" appear to me very inconclusive, and not to be compared with the deductions from widths of passages, intervals of buttresses, and dimensions of stones, which I enumerated some time since in the *Quarterly Statement* as indicating the length of the cubit.

C. R. C.

THE ANNUAL MEETING OF THE GENERAL COMMITTEE.

The Annual Meeting of the General Committee was held at the Offices of the Society, on Tuesday, 17th June. The chair was taken by Mr. James Glaisher.

The minutes of the last meeting were read and confirmed.

The Secretary then proceeded to read the Report of the Executive Committee on the work of the past year.

"My Lords and Gentlemen,

"Your Committee, elected at the last General Meeting, held on June 21st, 1881, have, on resigning their trust, to render you an account of their administration during the past year.

"1. The Committee have held twenty meetings since their last election.

"2. The subjects which have occupied their attention have been the following:—

I.—The Survey of Eastern Palestine.

"We had the pleasure of announcing, at the annual meeting of last year, that the services of Captain Conder and Lieutenant Mantell had been fortunately secured, together with those of Messrs. Black and Armstrong, formerly of the Royal Engineers, and were with Captain Stuart in the commencement of the Survey of 1872.

"The expedition started in the spring of last year, and after some good preliminary work, pending the arrival of the instruments, Captain Conder led his party across the Jordan, and commenced the Survey of Eastern Palestine.

"It was found, however, that difficulties were raised by the Turkish authorities of a kind which had never previously been encountered. The firman under which Captain Conder worked was one signed by the Sultan's predecessor, and peremptory orders arrived from Constantinople that, until a new firman had been signed, the work was to stop.

"Under these circumstances Captain Conder, after surveying 500 square miles, and executing a large number of plans, and examining a country which yielded many most interesting and valuable discoveries, was compelled to bring his party back to Jerusalem. Here he occupied them with laying down the field work, completing the observations, etc., etc., while negotiations were going on at Constantinople with the view of obtaining the firman desired.

"The Committee feel that they cannot sufficiently express their gratitude to Lord Dufferin, for the great trouble he has taken in this matter. His Majesty the Sultan has, we are happy to learn, promised to sign the firman granting permission to explore, within certain limits, east of the Jordan.

"We have now only to wait until this firman is signed.

"The present threatening outlook in Egypt and the East causes the withdrawal of the party to be a matter of some satisfaction to the Committee, as it relieves them of anxiety as to the safety of their officers.

"The Committee desire strongly to express their opinion that, under the circumstances, Captain Conder had no choice whatever but to yield to

the imperative orders from the Sultan, and to stop the Survey. They desire further to ask the General Committee for a vote of thanks, not only to this tried and able officer, but also to Lieutenant Mantell, whose energy and zeal have made him so valuable a second. Mr. Black had, unfortunately, to come home in the autumn, being disabled by an attack of dysentery, and Mr. Armstrong, the servant of the Fund for ten years, has acted with the energy and intelligence which have always largely contributed to the success of our Survey work. The following is the report sent to us by Captain Conder :—

"'21*st June*, 1882.

"'The party, including Lieutenant Mantell, R.E., and Messrs. Black and Armstrong, left England on 16th March, 1881, and reached Beyrout early in April. While awaiting our stores Lieutenant Mantell and I made a tour through Northern Syria, resulting in the discovery of the site of Kadesh on Orontes. The outbreak of a revolt of the Druzes rendered the Survey of the Hauran impossible, and the Governor of Syria refused us permission to survey under our former firman. I therefore transferred our base of operations to Jerusalem, and, while awaiting the arrival of the theodolites, we were employed in revisiting various points of interest concerning which additional information had been demanded in England. Meantime, an opportunity for commencing our operations in Moab presented itself, and on receipt of the instruments the party proceeded to Heshbon, and the Survey was carried on for nearly two months without the knowledge of the Turkish authorities. When, however, our presence became known, peremptory orders were sent to us to suspend our operations. I delayed as long as possible the stoppage of our work, but after five weeks of negotiation I found it necessary to submit to the pressure of the Turkish authorities.

"'The party went into winter quarters in December, during which time the field work of the 500 square miles' survey was worked out by Lieutenant Mantell and Mr. Armstrong, Mr. Black being invalided home in October. Meantime, I proceeded, by order of the Committee, to Constantinople, where, after three weeks of negotiation, I obtained, through the help of the British Ambassador, the promise of a new firman.

"'Shortly after my return to Jerusalem, their Royal Highnesses Princes Edward and George of Wales reached Palestine, and I was commanded to attend them during their tour, which lasted six weeks. The Royal party visited the Haram at Hebron, and I was entrusted with a report on this subject to be submitted to H.R.H. the Prince of Wales. The Princes also remained a week beyond Jordan, and additional information was obtained concerning the district of Mount Gilead north of that surveyed. By order of the Committee we left Palestine on 22nd May, 1882, but before leaving I received notice from H. E. the British Ambassador to say that the firman had been finally approved by the Minister of Public Instruction, and submitted by him to the Porte for confirmation. There

appears, therefore, reason to hope that the suspension of the Survey may be only temporary.

"'The results, as submitted to the Executive Committee, include the complete examination of 500 square miles, with a volume of notes and a large number of special plans and surveys, also Lieutenant Mantell's photographs east of Jordan. The reports on Kadesh, Tyre, Jerusalem (the Siloam inscription and the new Jewish tomb, etc.), Hebron, etc., are additional results of our expedition.

"'The country, when we left Palestine, was in a somewhat excited state, due to recent political events, but no outbreak of fanaticism was likely to occur.

"'I must, in conclusion, report that the conduct of the party gave me the greatest satisfaction; Lieutenant Mantell distinguished himself by the rapidity with which he attained a colloquial and grammatical knowledge of Arabic, and by his general zeal and ability he must be considered a valuable addition to the officers of the Society. Messrs. Black and Armstrong showed much discretion in their treatment of natives at a critical period, and the trustworthiness of their recent work quite equals that of their former performances. The native staff also gave satisfaction, and no member was dismissed during the fourteen months in which they were employed. The instruments provided by the Committee all gave satisfaction, especially the 8-inch theodolite, by Troughton & Simms. They are on their way home, and have been insured for £250.

"'The property of the Society left in Jerusalem is estimated at £170; it is all of imperishable character, properly stored, and carefully inventoried.

"'In conclusion, I consider that the credit of the Society stands better Palestine at the present moment than it has perhaps ever done before, while the genuine interest shown in our proceedings by their Royal Highnesses during their tour cannot fail to be of great advantage to the Society in the future.

"'Claude R. Conder, *Captain, R.E.*'

"II. The Committee have also been engaged upon the continuing of the publication of materials on their hands. Three additional volumes of the "Survey of Western Palestine" have been issued during the year, viz., the second volume of "Memoirs," the "Name Lists," and the volume of "Special Papers."

"The third volume of "Memoirs" has been printed, and the proofs are in Captain Conder's hands: this may be expected in September. It will contain, in addition to the memoirs as originally written, a great quantity of additions made by that officer during his recent stay in Western Palestine. Canon Tristram's volume on the natural history of the country will be ready before the end of the year, and it is hoped that Colonel Warren's volume on Jerusalem researches, and his portfolios of plans, will appear early next year.

"As regards the maps, the reduced map was published last September. It has been followed by another issue of the same map, with the water basins and sections of the country laid upon it, by Mr. Trelawney Saunders. This eminent geographer has also prepared, to accompany the new map, an "Introduction to the Survey of Western Palestine;" proofs of the Old Testament map, also prepared by Mr. Saunders, lie on the table for your inspection; the New Testament map is in the hands of the engraver.

"The Committee have to regret the loss by death during the last twelve months of many of their most valuable and useful members. The first of these is Dean Stanley, one of the founders of this Society. The first assistance which he rendered was in May 12th, 1865, when he lent the Jerusalem Chamber for the meeting in which the "Palestine Exploration Fund" was founded. The last occasion on which he showed his sympathy and gave his assistance was when he lent us the same chamber, in which the Survey of Eastern Palestine was resolved upon.

"We have next to lament the death of the Rev. F. W. Holland, Vicar of Evesham, and one of our honorary secretaries, also for many years associated with Mr. Grove as honorary secretary for this Society. He is known as having raised the "Sinai Survey Fund," and assisted in the accomplishment of that Survey.

"The death of Major Anderson, C.M.G., R.E., is another irreparable loss to the cause of Palestine research. He was always ready to give, not only advice, but time and active work, to the furtherance of our enterprise, and at the time of his death was the editor of the maps of Western Palestine, which ever after formed the basis of all writings and discussions on biblical geography and topography. His latest work for us was the outfit and despatch of the new expedition.

"We have also to regret the death of Mr. Samuel Gurney, for many years a members of the Executive Committee; of the Rev. Samuel Manning, member of the General Committee; and of the Rev. Dr. Barclay, Bishop of Jerusalem, member of the General Committee, both firm friends and upholders of the Society.

"The Committee regret to announce that Mr. Clermont Ganneau, recently appointed to the post of French Consul in Jaffa, has been recalled and appointed interpreter at the Foreign Office of Paris. By this change the cause of Archæology throughout the Holy Land suffers an irreparable loss.

"The following is the Balance Sheet for the year 1881 :—

RECEIPTS.

1881.		£	s.	d.	£	s.	d.
Jan. 1.	Balance from 1880.. ..	1,365	4	1			
	Less unpaid account ..	260	15	3			
					1,104	8	10
	Subscriptions and Lectures				2,430	5	10
	Publications				144	6	3
	Photographs				18	10	11
	Map and Memoirs				2,123	15	6
	To unpaid accounts				778	5	11
					6,599	13	3

EXPENDITURE.

	£	s.	d.
Expenditure on the Survey	2,628	12	7
Map and Memoirs	2,647	6	6
Rent	128	11	0
Printing	398	5	1
Advertising	40	14	10
Salaries and wages	436	2	8
Stationery, Office expenses, and Sundries .. .	70	18	0
Postage	136	11	0
Balance	112	11	7
	6,599	13	3

WALTER MORRISON,
Hon. Treasurer.

"It will be seen that the Committee spent 6,487*l.*, of which 2,628*l.* was spent in the Survey of Eastern Palestine, while 2,647*l.* was spent in producing the maps and "Memoirs." About 450*l.* was returned to subscribers in the shape of the Society's *Journal*. Rent, salaries, advertising, and management generally, about 750*l.*, that is about 11 per cent.

"The Committee have to ask that a vote of thanks be passed to Professor Sayce, Mr. Isaac Taylor, Mr. St. Chad Boscawen, the Rev. W. F. Birch, the Rev. Henry G. Tomkins, and M. Clermont Ganneau, for contributions to the *Journal* of the Society, to all the Honorary Secretaries of this Society; to all the annual subscribers; and to the following donors during the past year :—G. M. E., Miss Wakeham, Mr. H. Charlewood, Mr. Oliver Heywood, Mr. Fritz Reiss, Mr. Wolff, Mr. George Burns, Mr. Mackinnon, Mr. H. Vaughan, Sir John Cowell, Mr. G. S. Gibson, Professor Watson, Mrs. Anderson, Mr. H. M. Ormerod, Mr. G. Bickerton Evans, Mr. A. W. Jones, Mr. C. F. Fellows, Rev. H. Hall Houghton, Rev. W. H. Walford, Rev. F. E. Wigram, Rev. M. T. Farrar, Mr. A. H. Heywood, Miss Edwards, Mr. James Stevenson, Rev. A. M. Morrison, Mr. R. Crewdson, Mrs. Dykes, Mr. G. W. Norman, Rev. J. Braithwaite, Mr. G. Gotto, Mr. E. Whymper, and Mr. Dalzell.

"The Executive Committee have invited the following gentlemen to join the General Committee during the last year :—

Lord Eustace Cecil.
Sir John Cowell.
Major Grover.
Rev. Professor Lumby.
Mr. W. Aldis Wright.

"They have also invited the Rev. Dr. Ginsburg, Major Grover, and Mr. Aldis Wright to take the places vacated by the deaths of Mr. Holland, Major Anderson, and Mr. Gurney.

"In conclusion, the Committee have only to recommend that as the firman may be signed any day, in which case the field will be again open to them, strenuous efforts be continued to keep alive the interest now existing in the work, and to raise funds.

"Captain Conder is at present engaged in arranging his materials for publication."

On the conclusion of the Report, the CHAIRMAN laid upon the table all Captain Conder's work, including the finished map of the 500 square miles, his portfolio of special plans, his field books and observations, his photographs, tracings, and his note-book, filled with sketches, freehand drawings, plans and notes taken in the field. Mr. GLAISHER, in calling the attention of the Committee to this result of the year's campaign, spoke in the highest terms of Captain Conder's energy, and the great zeal with which the whole party had worked.

It was proposed by Lord TALBOT DE MALAHIDE, seconded by Mr. HENRY MAUDSLAY, and carried unanimously, that the Report be received and adopted.

The CHAIRMAN then laid upon the table the uncorrected proof of the Map of the Old Testament, and the drawing of that for the New Testament, explaining that the work had been placed in the hands of Mr. Trelawney Saunders, who had been actively engaged upon it for the last eighteen months, the result being that the map before them was far superior to any previously existing maps to illustrate the Old and New Testaments, as the Society's map of Western Palestine was superior to any previously existing maps of the country. He explained also that Mr. Saunders was alone responsible for his identifications, and that, though students of the Bible would not probably agree with Mr. Saunders, and with each other, in all the identifications adopted or made by him, there would be but one opinion on the experience, labour, and thought brought to bear on the production of these two beautiful works.

The CHAIRMAN next proceeded to say that he would take advantage of Dr. Chaplin's presence among them that day to express personally the very deep gratitude of the Committee for the many acts of kindness and sympathy which he has shown to the Society's officers and party in Jerusalem. He tendered him personally the best thanks of the Committee.

In reply, Dr. CHAPLIN briefly drew a contrast between the knowledge of the country possessed by educated people before the foundation of the Society, and that which now exists, thanks to its labours. He also gave his own testimony to the admirable conduct of the officers under the many difficulties which surround the scientific explorers in the East.

The Rev. WILLIAM WRIGHT proposed the re-election of the Executive Committee. This was seconded by Captain CONDER, and unanimously carried.

Mr. MACGREGOR proposed, and Professor HAYTER LEWIS seconded, the election of the following new members of the General Committee :—

Bishop of Truro.
Bishop of Melbourne.
Colonel Locock, R.E.
Rev. Dr. Löwy.
Rev. H. L. Stracey.

After a vote of thanks to the Chairman, the meeting was adjourned.